```
=> fil reg
FILE 'REGISTRY' ENTERED AT 11:27:57 ON 29 SEP 2008
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STRUCTURE FILE UPDATES:   26 SEP 2008  HIGHEST RN 1053621-88-7
DICTIONARY FILE UPDATES:  26 SEP 2008  HIGHEST RN 1053621-88-7

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

  Please note that search-term pricing does apply when
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experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> d que stat l3
L2              STR
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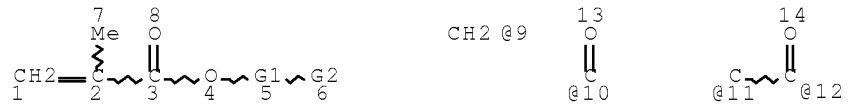


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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  14

STEREO ATTRIBUTES: NONE
L3        94502 SEA FILE=REGISTRY SSS FUL L2

100.0% PROCESSED  444511 ITERATIONS                          94502 ANSWERS
SEARCH TIME: 00.00.03


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L12             STR
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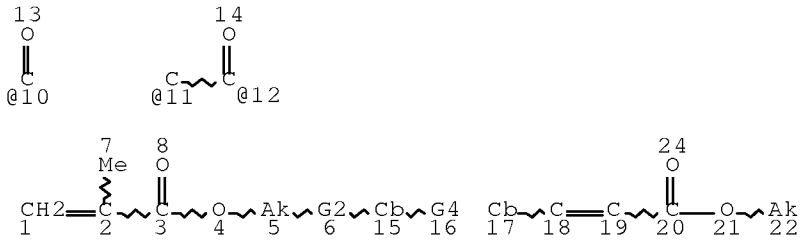

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DEFAULT MLEVEL IS ATOM
GGCAT IS SAT AT 5
GGCAT IS MCY UNS AT 15
GGCAT IS MCY UNS AT 17
GGCAT IS SAT AT 22
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

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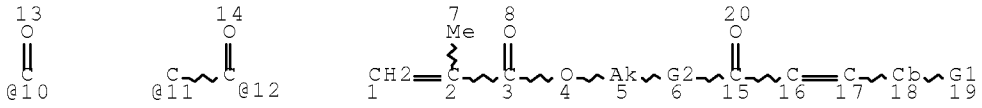

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NODE ATTRIBUTES:
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM
GGCAT IS SAT AT 5
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 19

STEREO ATTRIBUTES: NONE

=> d his

(FILE 'HOME' ENTERED AT 09:10:17 ON 29 SEP 2008)

FILE 'HCAPLUS' ENTERED AT 09:10:27 ON 29 SEP 2008

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                ACT PEZ729/A
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L2              STR
L3         94502 SEA FILE=REGISTRY SSS FUL L2
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L4           17 S L1 AND L3

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L6              STR L2

     FILE 'REGISTRY' ENTERED AT 10:02:31 ON 29 SEP 2008
L7            0 S L6 SSS SAM SUB=L3

     FILE 'LREGISTRY' ENTERED AT 10:18:15 ON 29 SEP 2008
L8              STR L6

     FILE 'REGISTRY' ENTERED AT 10:22:50 ON 29 SEP 2008
L9            0 S L8 SSS SAM SUB=L3

     FILE 'LREGISTRY' ENTERED AT 10:30:52 ON 29 SEP 2008
L10             STR L8

     FILE 'REGISTRY' ENTERED AT 10:42:42 ON 29 SEP 2008
L11           0 S L10 SSS SAM SUB=L3
L12             STR L10
L13           0 S L12 SSS SAM SUB=L3
L14          25 S L12 SSS FUL SUB=L3
L15           7 S L4 AND L14
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     FILE 'LREGISTRY' ENTERED AT 10:54:36 ON 29 SEP 2008
L16             STR L2

     FILE 'REGISTRY' ENTERED AT 11:08:40 ON 29 SEP 2008
L17           3 S L16 SSS SAM SUB=L3
L18         136 S L16 SSS FUL SUB=L3
                SAV L18 PEZ729S2/A

     FILE 'HCAPLUS' ENTERED AT 11:12:05 ON 29 SEP 2008
L19          16 S L14
L20          45 S L18

     FILE 'REGISTRY' ENTERED AT 11:14:31 ON 29 SEP 2008
L21             STR
L22          50 S L21
L23             STR L21
L24          50 S L23
L25      161622 S 591.146.35/RID
L26           6 S (L14 OR L18) AND L25
L27           6 S L4 AND L26

     FILE 'HCAPLUS' ENTERED AT 11:18:11 ON 29 SEP 2008
L28           1 S L27
L29       56881 S L25
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L31             1 S L28 AND L30
L32            10 S L19 NOT L30
L33            45 S L20 NOT (L30 OR L32)
L34               QUE POLYMER?
L35            33 S L33 AND L34
L36            51 S (L19 OR L20) AND (PY<=2003 OR PRY<=2003 OR AY<=2003)
L37             1 S L30 AND L36
L38             9 S L32 AND L36
L39            30 S L35 AND L36


=> fil hcap
FILE 'HCAPLUS' ENTERED AT 11:28:09 ON 29 SEP 2008
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FILE COVERS 1907 - 29 Sep 2008  VOL 149 ISS 14
FILE LAST UPDATED: 28 Sep 2008  (20080928/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2008.

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 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d ibib abs hitstr hitind l30 1-6

L30  ANSWER 1 OF 6  HCAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2008:471101  HCAPLUS  Full-text
DOCUMENT NUMBER:          148:483380
TITLE:                    Method for manufacturing optical retardation
                          film for liquid crystal displays
INVENTOR(S):              Kiyohara, Yoshiko
PATENT ASSIGNEE(S):       Dai Nippon Printing Co., Ltd., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 43pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.        DATE
     ---------------      ----   --------    --------------------
     --------
     JP 2008089894         A     20080417    JP 2006-269831
```

200609
29

PRIORITY APPLN. INFO.: JP 2006-269831

200609
29

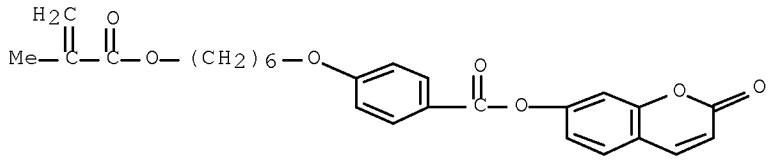
AB The title method includes the steps of: fabricating an optical retardation layer by applying an UV-curable coating material, which contains crosslinking liquid crystal compds. and photosensitive compds. for an optical retarder layer on a transparent substrate; applying UV on the coated layer from the back of the substrate for obtaining liquid crystal-aligning function; and heating the liquid crystal material to be aligned; and crosslinking the liquid crystals. The method shows small haze.

IT 177856-56-3DP, 7-[[4-(6-Methacryloyloxy)hexyloxy]benzoyloxy] coumarin homopolymer, crosslinked 188956-85-6DP, crosslinked
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(method for manufacturing optical retardation film for liquid crystal displays)

RN 177856-56-3 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-oxo-2H-1-benzopyran-7-yl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 177856-55-2
CMF C26 H26 O7

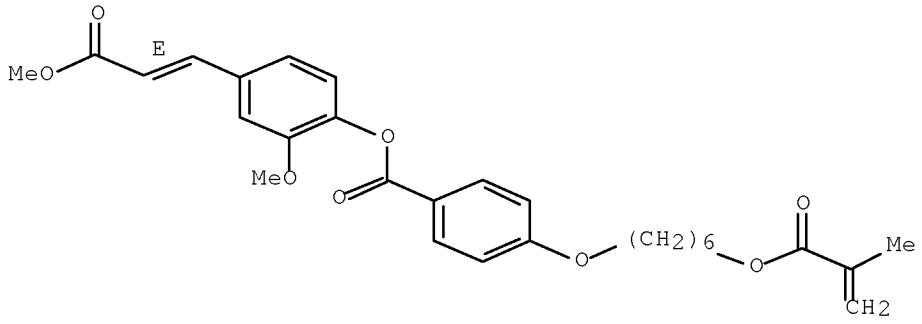


RN 188956-85-6 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propen-1-yl]phenyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 188956-71-0
CMF C28 H32 O8

Double bond geometry as shown.

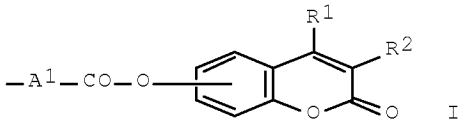


CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 177856-56-3DP, 7-[[4-(6-Methacryloyloxy)hexyloxy]benzoyloxy] coumarin homopolymer, crosslinked 188956-85-6DP, crosslinked
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(method for manufacturing optical retardation film for liquid crystal displays)

L30 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1299802 HCAPLUS Full-text
DOCUMENT NUMBER: 147:531133
TITLE: UV-curable compositions for manufacture of optical retardation films without using alignment films
INVENTOR(S): Kiyohara, Yoshiko; Okada, Masato; Furukawa, Minoru
PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 42pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007297606	A	20071115	JP 2007-95745	20070330
PRIORITY APPLN. INFO.:			JP 2006-101134 A	20060331

GI



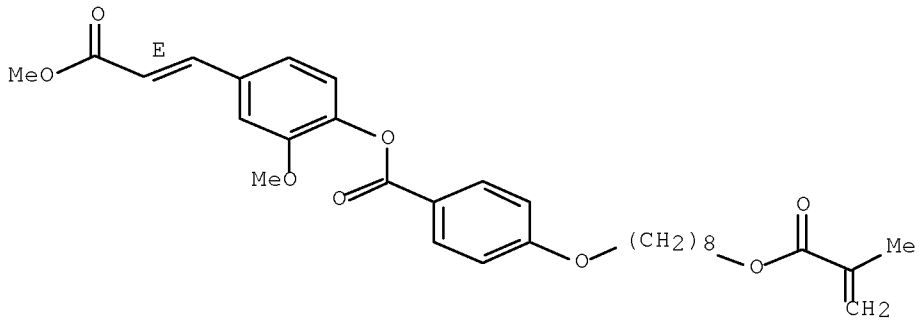
AB The compns. comprise crosslinkable group-containing liquid crystal materials and photoreactive compds. having photoreactive groups I and/or A2CO2A3CH:CHCO2R3 [A1-A3 = (substituted) 1,4-phenylene, 4,4'-biphenylene, 1,4-naphthylene, etc.; R1 = H, C1-4 alkyl, alkoxy; R2 = C1-4 alkyl, alkoxy, C2-6 alkyloxycarbonyl, cyano; R3 = (substituted) C1-20 alkyl]. The retardation films are manufactured by applying the UV-curable compns. on transparent substrates, reaction of the photoreactive compds. under UV irradiation for aligning the crosslinkable liquid crystal materials, arranging the liquid crystal materials according to the alignment, and crosslinking the crosslinkable liquid crystal materials. The retardation films show high transparency.

IT 841223-09-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(UV-curable compns. for manufacture of optical retardation films without using alignment films)

RN 841223-09-4 HCAPLUS

CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propen-1-yl)oxy]octyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propen-1-yl]phenyl ester (CA INDEX NAME)

Double bond geometry as shown.



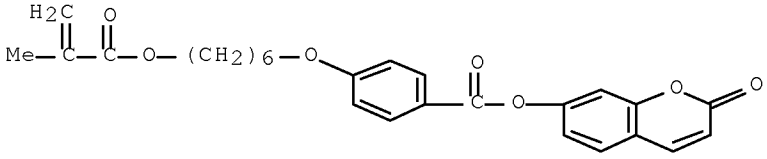
IT 177856-56-3P, 7-[[4-(6-Methacryloyloxy)hexyloxy]benzoyloxy]coumarin homopolymer 188956-85-6P, 2-Methoxy-4-[(E)-2-methoxycarbonylvinyl]phenyl-4-[8-(2-methacryloyloxy)hexyloxy]benzoate homopolymer 848030-43-3P, 2-Methoxy-4-[(E)-2-methoxycarbonylvinyl]phenyl-4-[8-(2-methacryloyloxy)octyloxy]benzoate homopolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(crosslinked; UV-curable compns. for manufacture of optical retardation films without using alignment films)

RN 177856-56-3 HCAPLUS

CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-oxo-2H-1-benzopyran-7-yl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 177856-55-2
CMF C26 H26 O7

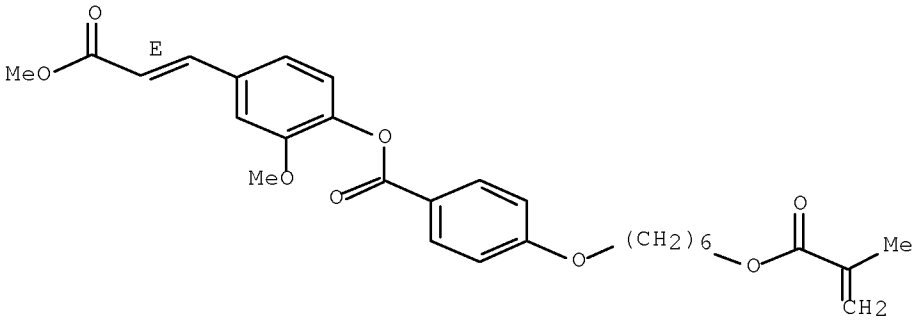


RN 188956-85-6 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propen-1-yl]phenyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 188956-71-0
CMF C28 H32 O8

Double bond geometry as shown.

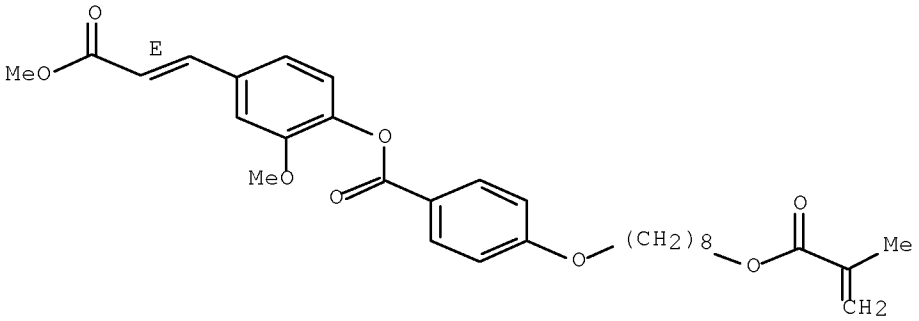


RN 848030-43-3 HCAPLUS
CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propen-1-yl)oxy]octyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propen-1-yl]phenyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 841223-09-4
CMF C30 H36 O8

Double bond geometry as shown.



CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38

IT 140918-53-2P, 4-(8-Hydroxyoctyloxy)benzoic acid 841223-09-4P
956115-76-7P, 4-[8-(2-Methacryloyloxy)octyloxy]benzoic acid
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(UV-curable compns. for manufacture of optical retardation films without using alignment films)

IT 177856-56-3P, 7-[[4-(6-Methacryloyloxy)hexyloxy]benzoyloxy]coumarin homopolymer 188956-85-6P, 2-Methoxy-4-[(E)-2-methoxycarbonylvinyl]phenyl-4-[8-(2-methacryloyloxy)hexyloxy]benzoate homopolymer 848030-43-3P, 2-Methoxy-4-[(E)-2-methoxycarbonylvinyl]phenyl-4-[8-(2-methacryloyloxy)octyloxy]benzoate homopolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(crosslinked; UV-curable compns. for manufacture of optical retardation films without using alignment films)

L30 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1250854 HCAPLUS Full-text
DOCUMENT NUMBER: 146:16429
TITLE: Ferroelectric liquid crystal display devices and manufacturing method therefor
INVENTOR(S): Okabe, Masato; Saruwatari, Naoko
PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 39pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006323216	A	20061130	JP 2005-147244	200505 19
US 20070026165	A1	20070201	US 2006-437778	200605 18
PRIORITY APPLN. INFO.:			JP 2005-147241 A	200505

19

JP 2005-147244 A 200505 19

JP 2005-147246 A 200505 19

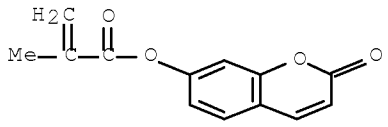
AB The title display has a liquid crystal layer, which consists of a ferroelec. liquid crystal and a liquid crystal polymer, between: a first photosensitive liquid crystal-alignment substrate, which has an electrode layer, and a photosensitive liquid crystal alignment film; and a second photosensitive liquid crystal-alignment substrate, which has an electrode layer and a second liquid crystal alignment layer, wherein the two photosensitive liquid crystal alignment layers are made of different materials. The device shows stable liquid crystal alignment.

IT 170788-72-4 177856-56-3 188956-85-6
RL: TEM (Technical or engineered material use); USES (Uses)
(alignment layers of liquid crystal display devices)

RN 170788-72-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxo-2H-1-benzopyran-7-yl ester, homopolymer (CA INDEX NAME)

CM 1

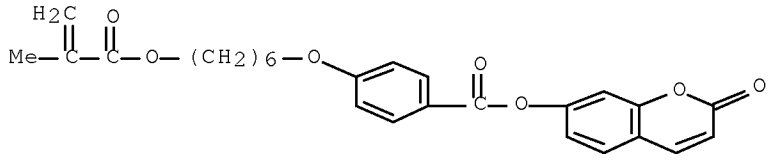
CRN 64498-59-5
CMF C13 H10 O4



RN 177856-56-3 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-oxo-2H-1-benzopyran-7-yl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 177856-55-2
CMF C26 H26 O7



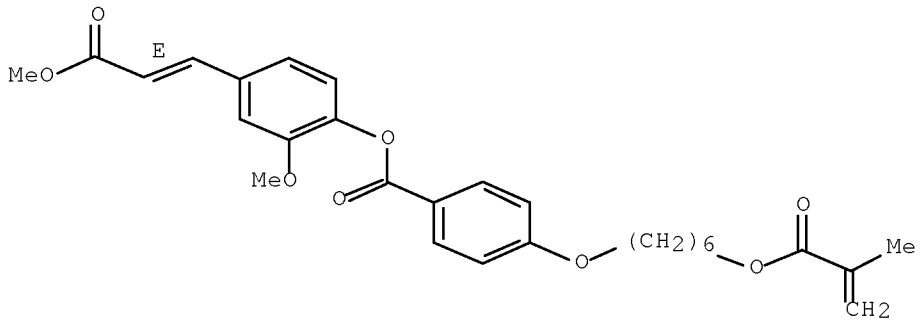
RN 188956-85-6 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propen-1-yl]phenyl ester,

homopolymer (CA INDEX NAME)

CM 1

CRN 188956-71-0
CMF C28 H32 O8

Double bond geometry as shown.



CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 162206-20-4 170788-72-4 177856-56-3 188956-85-6
RL: TEM (Technical or engineered material use); USES (Uses)
(alignment layers of liquid crystal display devices)

L30 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:963184 HCAPLUS Full-text
DOCUMENT NUMBER: 143:275720
TITLE: Ferroelectric liquid crystal display showing stable monodomain orientation
INVENTOR(S): Saruwatari, Naoko; Okabe, Masato; Hama, Hideo
PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005234550	A	20050902	JP 2005-11692	200501 19
US 20050233094	A1	20051020	US 2005-39278	200501 19
PRIORITY APPLN. INFO.:			JP 2004-14976 A	200401 22

AB The title liquid crystal display includes 2 liquid crystal alignment films in which the first alignment film is made up of a photoreactive type material and

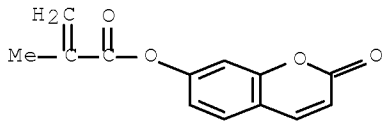
the second alignment film is made up of a photoisomerization type material. The photoreactive type material is a photodimerization type material or a photodecompn. type material.

IT 170788-72-4 177856-56-3 188956-85-6
RL: DEV (Device component use); USES (Uses)
(photodimerization type liquid crystal alignment film in ferroelec. liquid crystal display showing stable monodomain orientation)

RN 170788-72-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxo-2H-1-benzopyran-7-yl ester, homopolymer (CA INDEX NAME)

CM 1

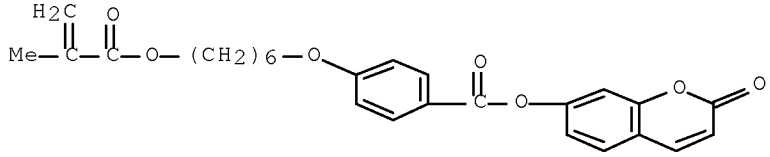
CRN 64498-59-5
CMF C13 H10 O4



RN 177856-56-3 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-oxo-2H-1-benzopyran-7-yl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 177856-55-2
CMF C26 H26 O7

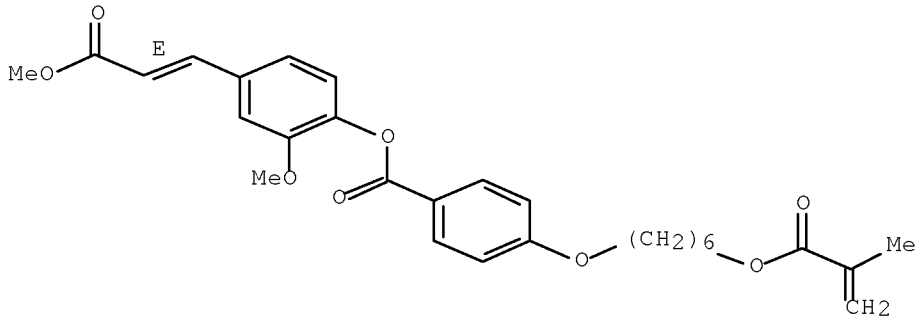


RN 188956-85-6 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propen-1-yl]phenyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 188956-71-0
CMF C28 H32 O8

Double bond geometry as shown.



IC ICM G02F001-141
ICS C08F020-30; G02F001-1337
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 75
IT 170788-72-4 177856-56-3 188956-85-6
304657-68-9
RL: DEV (Device component use); USES (Uses)
(photodimerization type liquid crystal alignment film in ferroelec. liquid crystal display showing stable monodomain orientation)

L30 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:692404 HCAPLUS Full-text
DOCUMENT NUMBER: 143:183230
TITLE: Ferroelectric liquid crystal displays with stable monodomain orientation
INVENTOR(S): Saruwatari, Naoko; Okabe, Masato; Hama, Hideo
PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005208353	A	20050804	JP 2004-14977	20040122
WO 2005071475	A1	20050804	WO 2005-JP614	20050119

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,

GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1710617	A1	20061011	EP 2005-709244	200501 19
R: DE				
CN 1910508	A	20070207	CN 2005-80002978	200501 19
US 20070154652	A1	20070705	US 2006-587069	200607 21
KR 2007001960	A	20070104	KR 2006-716730	200608 21
PRIORITY APPLN. INFO.:			JP 2004-14977 A	200401 22
			WO 2005-JP614 W	200501 19

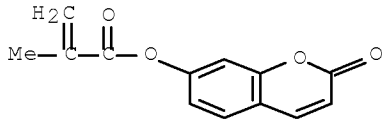
AB In the displays (of TFT active matrix method, field sequential color method), ferroelec. liquid crystals are disposed between a pair of substrates each equipped with electrodes and optical alignment layers on the opposed side. The alignment layers comprise materials (e.g., cinnamate-, coumarin-, or quinoline-containing polymers) imparting optical anisotropy by photoreaction (photodimerization or photodecompn.) and having different compns. ratio between the both.

IT 170788-72-4 177856-56-3 188956-85-6
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(optical alignment layers; ferroelec. liquid crystal displays having photoreactive material-containing optical alignment layers and showing stable monodomain orientation)

RN 170788-72-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxo-2H-1-benzopyran-7-yl ester, homopolymer (CA INDEX NAME)

CM 1

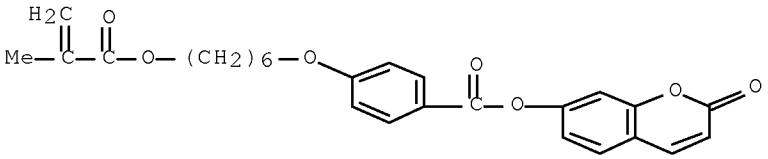
CRN 64498-59-5
CMF C13 H10 O4



RN 177856-56-3 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-oxo-2H-1-benzopyran-7-yl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 177856-55-2
CMF C26 H26 O7

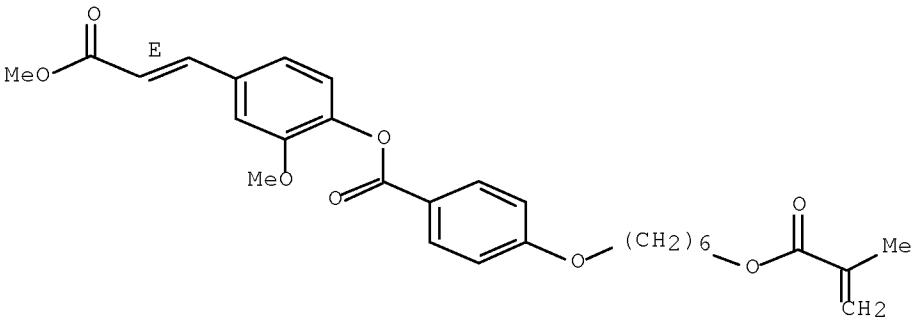


RN 188956-85-6 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propen-1-yl]phenyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 188956-71-0
CMF C28 H32 O8

Double bond geometry as shown.



IC ICM G02F001-1337
ICS C08F020-30; C08F020-36; G02F001-133; G02F001-1335; G02F001-141
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 73
IT 162206-20-4 170788-72-4 177856-56-3 188956-85-6
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(optical alignment layers; ferroelec. liquid crystal displays having photoreactive material-containing optical alignment layers and showing stable monodomain orientation)

L30 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:141129 HCAPLUS Full-text
DOCUMENT NUMBER: 142:220172
TITLE: Polymerizable copolymer compositions for producing polymeric alignment layers of liquid crystals
INVENTOR(S): Studer, Peggy; Scheifele, Patrick; Matsumoto, Yonetatsu; Stoessel, Richard
PATENT ASSIGNEE(S): Huntsman Advanced Materials Switzerland G.m.b.H., Switz.

SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005014677	A1	20050217	WO 2004-EP51425	20040708
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1644425	A1	20060412	EP 2004-766168	20040708
EP 1644425	B1	20071226		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1823102	A	20060823	CN 2004-80019912	20040708
AT 382064	T	20080115	AT 2004-766168	20040708
IN 2006MN00031	A	20060901	IN 2006-MN31	20060106
US 20070179266	A1	20070802	US 2006-564729	20061016

PRIORITY APPLN. INFO.:

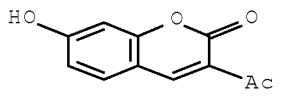
CH 2003-1244	A	20030716
WO 2004-EP51425	W	20040708

AB Title composition comprises (A) at least one ethylenically unsatd. monomer to which a photochem. isomerizable or dimerizable mol. is covalently bonded, (B) at least one ethylenically unsatd. monomer to which a sensitizer is covalently bonded, and (C) optionally other ethylenically unsatd. comonomers.

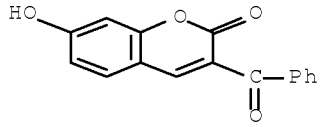
IT 10441-27-7P, 3-Acetyl-7-hydroxycoumarin 19088-67-6P, 3-Benzoyl-7-hydroxycoumarin 841223-04-9P, 3-Benzoyl-7-(8-hydroxy-n-oct-1-yloxy)coumarin 841223-07-2P, 3-Acetyl-7-(8-hydroxy-n-oct-1-yloxy)coumarin
RL: IMF (Industrial manufacture); RCT (Reactant); PREP

(Preparation); RACT (Reactant or reagent)
(intermediate; production of polymerizable copolymers for producing polymeric alignment layers of liquid crystals)

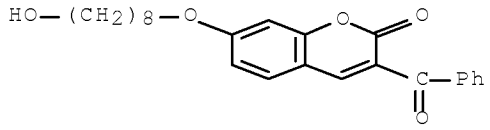
RN 10441-27-7 HCAPLUS
CN 2H-1-Benzopyran-2-one, 3-acetyl-7-hydroxy- (CA INDEX NAME)



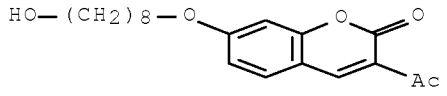
RN 19088-67-6 HCAPLUS
CN 2H-1-Benzopyran-2-one, 3-benzoyl-7-hydroxy- (CA INDEX NAME)



RN 841223-04-9 HCAPLUS
CN 2H-1-Benzopyran-2-one, 3-benzoyl-7-[(8-hydroxyoctyl)oxy]- (CA INDEX NAME)



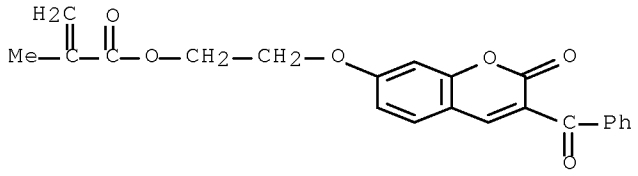
RN 841223-07-2 HCAPLUS
CN 2H-1-Benzopyran-2-one, 3-acetyl-7-[(8-hydroxyoctyl)oxy]- (CA INDEX NAME)



IT 841223-01-6P, 3-Benzoyl-7-(2-methacryloyloxy-n-ethyloxy)coumarin 841223-02-7P, 3-Benzoyl-7-[5-methacryloyloxydi(ethylenoxy)]coumarin 841223-03-8P, 3-Benzoyl-7-(8-methacryloyloxy-n-oct-1-yloxy)coumarin 841223-05-0P, 3-Acetyl-7-(2-methacryloyloxy-n-ethyloxy)coumarin 841223-06-1P, 3-Acetyl-7-(8-methacryloyloxy-n-oct-1-yloxy)coumarin 841223-08-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(production of polymerizable copolymers for producing polymeric alignment layers of liquid crystals)

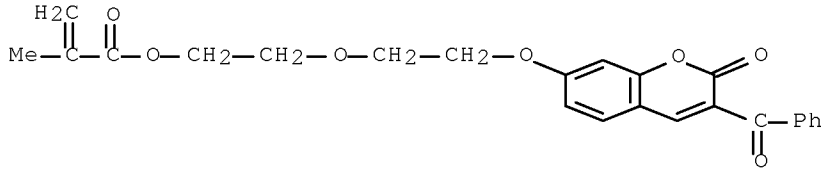
RN 841223-01-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3-benzoyl-2-oxo-2H-1-benzopyran-7-yl)oxy]ethyl ester (CA INDEX NAME)



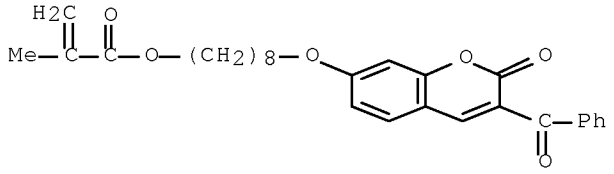
RN 841223-02-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[2-[(3-benzoyl-2-oxo-2H-1-benzopyran-7-yl)oxy]ethoxy]ethyl ester (CA INDEX NAME)



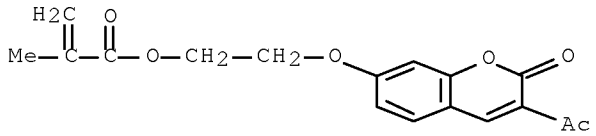
RN 841223-03-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 8-[(3-benzoyl-2-oxo-2H-1-benzopyran-7-yl)oxy]octyl ester (CA INDEX NAME)



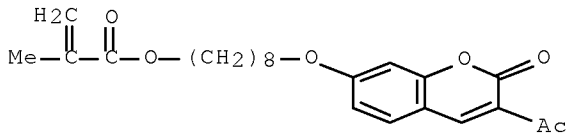
RN 841223-05-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3-acetyl-2-oxo-2H-1-benzopyran-7-yl)oxy]ethyl ester (CA INDEX NAME)

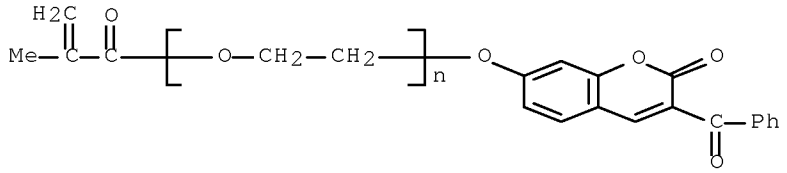


RN 841223-06-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 8-[(3-acetyl-2-oxo-2H-1-benzopyran-7-yl)oxy]octyl ester (CA INDEX NAME)



RN 841223-08-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(2-methyl-1-oxo-2-propenyl)-ω-[(3-benzoyl-2-oxo-2H-1-benzopyran-7-yl)oxy]- (9CI) (CA INDEX NAME)

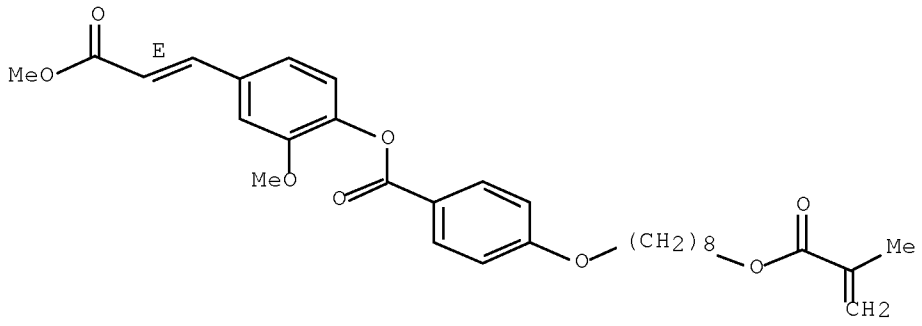


IT 841223-10-7P 841223-11-8P 841223-12-9P
841223-13-0P 841223-14-1P 841223-15-2P
841223-16-3P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of polymerizable copolymers for producing polymeric alignment layers of liquid crystals)
RN 841223-10-7 HCAPLUS
CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propenyl)oxy]octyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propenyl]phenyl ester, polymer with 8-[2-[4-(dimethylamino)benzoyl]-4-methylphenoxy]octyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

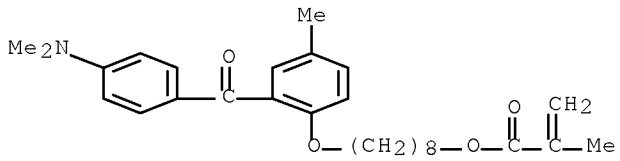
CRN 841223-09-4
CMF C30 H36 O8

Double bond geometry as shown.



CM 2

CRN 841222-99-9
CMF C28 H37 N O4

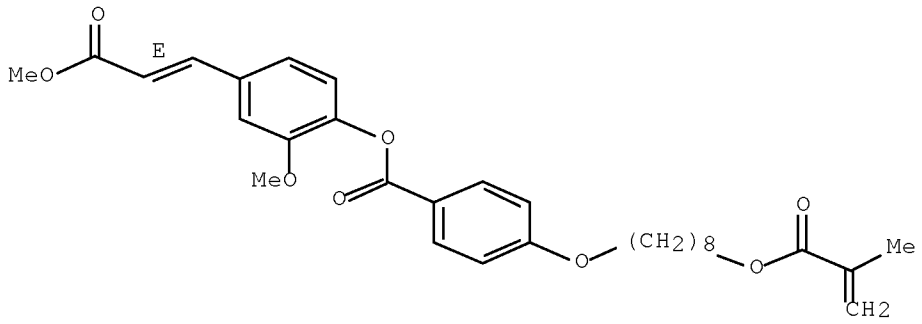


RN 841223-11-8 HCAPLUS
CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propenyl)oxy]octyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propenyl]phenyl ester, polymer with 2-[(3-benzoyl-2-oxo-2H-1-benzopyran-7-yl)oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

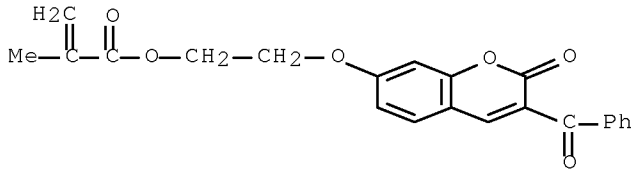
CRN 841223-09-4
CMF C30 H36 O8

Double bond geometry as shown.



CM 2

CRN 841223-01-6
CMF C22 H18 O6

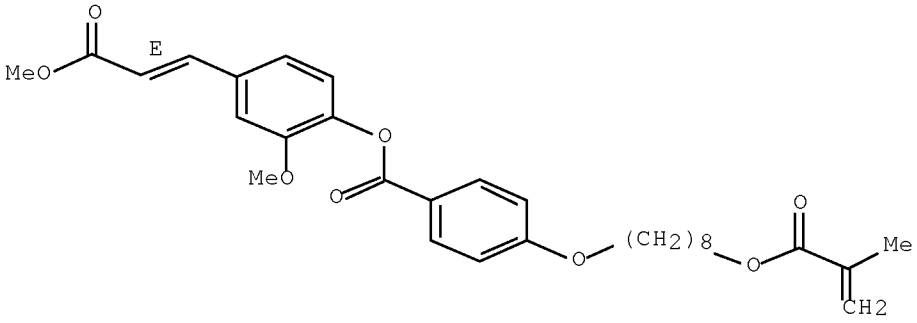


RN 841223-12-9 HCAPLUS
CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propenyl)oxy]octyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propenyl]phenyl ester, polymer with 2-[2-[(3-benzoyl-2-oxo-2H-1-benzopyran-7-yl)oxy]ethoxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

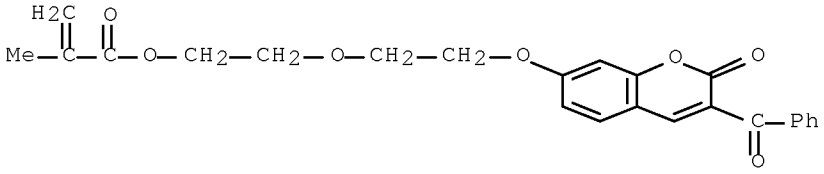
CRN 841223-09-4
CMF C30 H36 O8

Double bond geometry as shown.



CM 2

CRN 841223-02-7
CMF C24 H22 O7

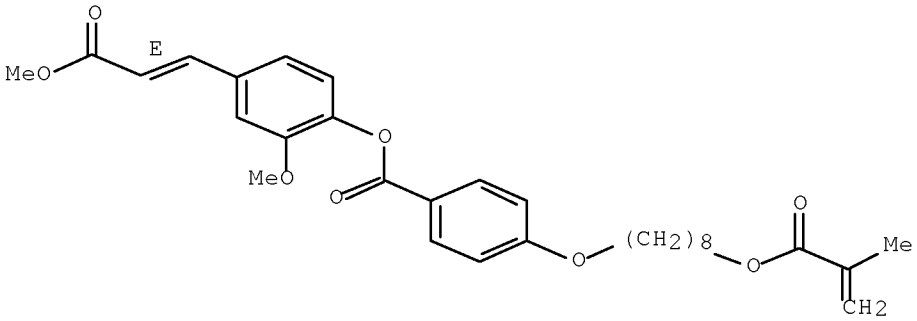


RN 841223-13-0 HCAPLUS
CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propenyl)oxy]octyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propenyl]phenyl ester, polymer with 8-[(3-benzoyl-2-oxo-2H-1-benzopyran-7-yl)oxy]octyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

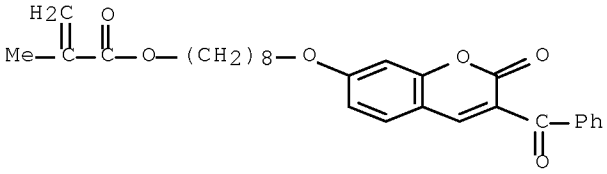
CRN 841223-09-4
CMF C30 H36 O8

Double bond geometry as shown.



CM 2

CRN 841223-03-8
CMF C28 H30 O6

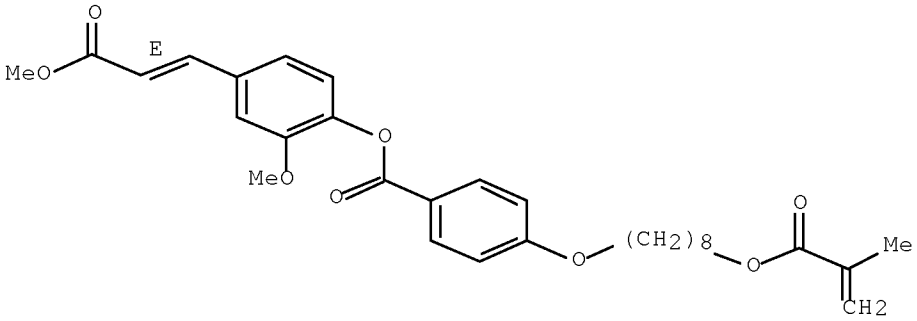


RN 841223-14-1 HCAPLUS
CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propenyl)oxy]octyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propenyl]phenyl ester, polymer with 2-[(3-acetyl-2-oxo-2H-1-benzopyran-7-yl)oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

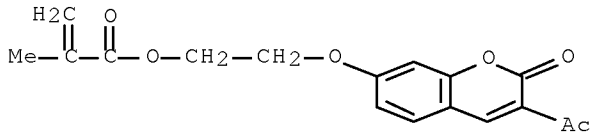
CRN 841223-09-4
CMF C30 H36 O8

Double bond geometry as shown.



CM 2

CRN 841223-05-0
CMF C17 H16 O6

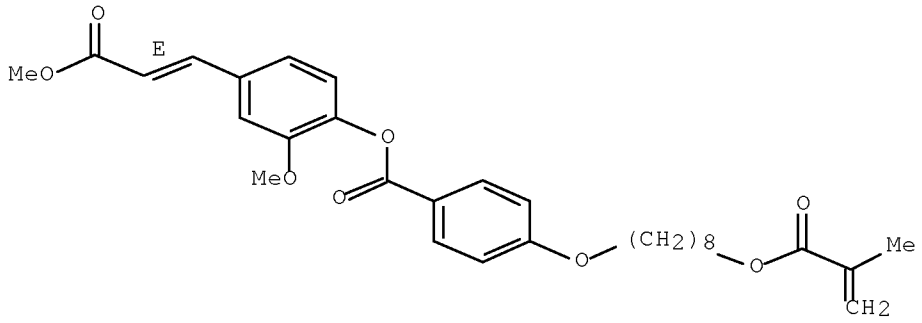


RN 841223-15-2 HCAPLUS
CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propenyl)oxy]octyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propenyl]phenyl ester, polymer with 8-[(3-acetyl-2-oxo-2H-1-benzopyran-7-yl)oxy]octyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

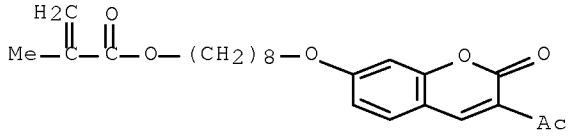
CRN 841223-09-4
CMF C30 H36 O8

Double bond geometry as shown.



CM 2

CRN 841223-06-1
CMF C23 H28 O6



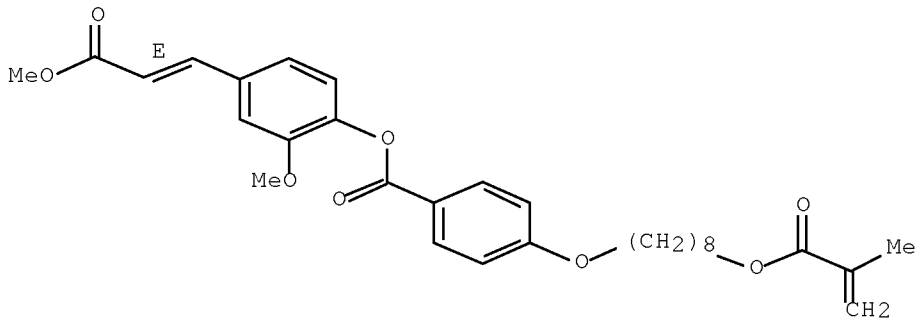
RN 841223-16-3 HCAPLUS
CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propenyl)oxy]octyl]oxy]-,

2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propenyl]phenyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-[(3-benzoyl-2-oxo-2H-1-benzopyran-7-yl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

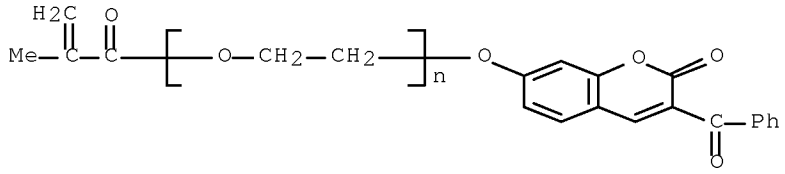
CRN 841223-09-4
CMF C30 H36 O8

Double bond geometry as shown.



CM 2

CRN 841223-08-3
CMF (C2 H4 O)n C20 H14 O5
CCI PMS



IC ICM C08F246-00
ICS C09K019-38; G02F001-1337; C08F220-30
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 74, 75
IT 10441-27-7P, 3-Acetyl-7-hydroxycoumarin 19088-67-6P, 3-Benzoyl-7-hydroxycoumarin 841223-00-5P 841223-04-9P, 3-Benzoyl-7-(8-hydroxy-n-oct-1-yloxy)coumarin 841223-07-2P, 3-Acetyl-7-(8-hydroxy-n-oct-1-yloxy)coumarin
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; production of polymerizable copolymers for producing polymeric alignment layers of liquid crystals)
IT 841222-99-9P 841223-01-6P, 3-Benzoyl-7-(2-methacryloyloxy-n-ethyloxy)coumarin 841223-02-7P, 3-Benzoyl-7-[5-methacryloyloxydi(ethylenoxy)]coumarin 841223-03-8P, 3-Benzoyl-7-(8-methacryloyloxy-n-oct-1-yloxy)coumarin

841223-05-0P, 3-Acetyl-7-(2-methacryloyloxy-n-ethyloxy)coumarin 841223-06-1P, 3-Acetyl-7-(8-methacryloyloxy-n-oct-1-yloxy)coumarin 841223-08-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(production of polymerizable copolymers for producing polymeric alignment layers of liquid crystals)

IT 841223-10-7P 841223-11-8P 841223-12-9P 841223-13-0P 841223-14-1P 841223-15-2P 841223-16-3P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of polymerizable copolymers for producing polymeric alignment layers of liquid crystals)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitstr hitind l38 1-9

L38 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:589530 HCAPLUS Full-text
DOCUMENT NUMBER: 141:124520
TITLE: Crosslinkable, photoactive acrylic polymers and their use
INVENTOR(S): Studer, Peggy; Scheifele, Patrick; Stoessel, Richard; Matsumoto, Yonetatsu; Barny, Stefan
PATENT ASSIGNEE(S): Huntsman Advanced Materials Switzerland G.m.b.H., Switz.
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004060861	A2	20040722	WO 2003-EP50926	20031202
			<--	
WO 2004060861	A3	20040930		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003302749	A1	20040729	AU 2003-302749	20031202

<--

EP 1567571 A2 20050831 EP 2003-812073
200312
02

<--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

CN 1745115 A 20060308 CN 2003-80109411
200312
02

<--

JP 2006511686 T 20060406 JP 2005-506703
200312
02

<--

IN 2005DN02406 A 20070406 IN 2005-DN2406
200506
06

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US 20050288426 A1 20051229 US 2005-537546
200507
13

<--

PRIORITY APPLN. INFO.: CH 2002-2074 A
200212
06

<--

CH 2003-1095 A
200306
23

<--

WO 2003-EP50926 W
200312
02

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AB Copolymers composed of (a) at least one monomer from the group of acrylates, methacrylates, acrylamides and methacrylamides, to each of which is bonded covalently, directly or via a bridging group, a photochem. isomerizable or dimerizable mol., (b) at least one polyoxyalkyl ester or one polyoxyalkylamide of an ethylenically unsatd. mono- or dicarboxylic acid, or one polyoxyalkyl ether of an ethylenically unsatd. alc., and (c) optionally, other ethylenically unsatd. comonomers are outstandingly suitable as alignment layers for liquid crystals. A polymer was prepared from 2-methoxy-4-(3-methoxy- 3-oxo-1-propenyl)phenyl 4-[[8-[(2-methyl-1-oxo-2-propenyl)oxy]octyl]oxy]benzoate and polyethylene glycol methacrylate.

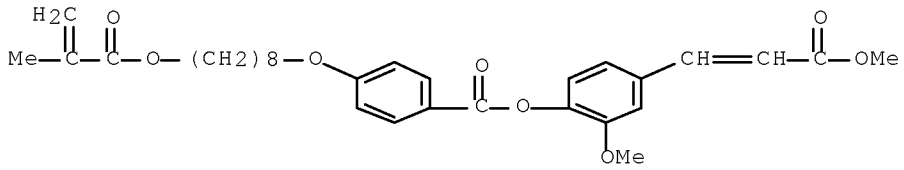
IT 724731-96-8P 724772-73-0P
RL: IMF (Industrial manufacture); PREP (Preparation)
(crosslinkable, photoactive acrylic polymers and their use)

RN 724731-96-8 HCAPLUS

CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propenyl)oxy]octyl]oxy]-, 2-methoxy-4-(3-methoxy-3-oxo-1-propenyl)phenyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

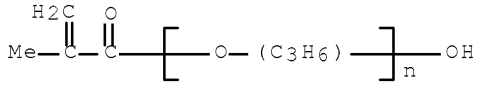
CM 1

CRN 724731-93-5
CMF C30 H36 O8



CM 2

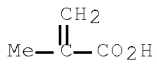
CRN 39420-45-6
CMF (C3 H6 O)n C4 H6 O2
CCI IDS, PMS



RN 724772-73-0 HCAPLUS
CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propenyl)oxy]octyl]oxy]-, 2-methoxy-4-(3-methoxy-3-oxo-1-propenyl)phenyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl), 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4
CMF C4 H6 O2

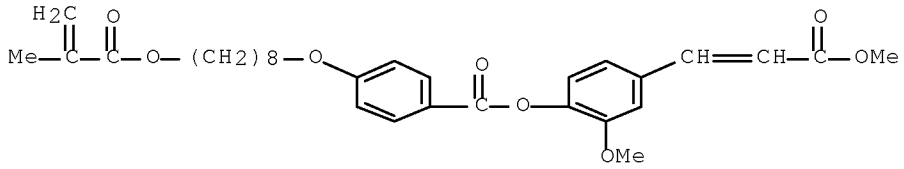


CM 2

CRN 724731-94-6
CMF (C30 H36 O8 . (C2 H4 O)n C4 H6 O2)x
CCI PMS

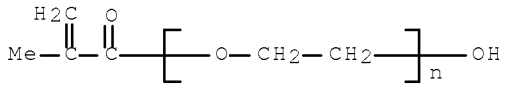
CM 3

CRN 724731-93-5
CMF C30 H36 O8



CM 4

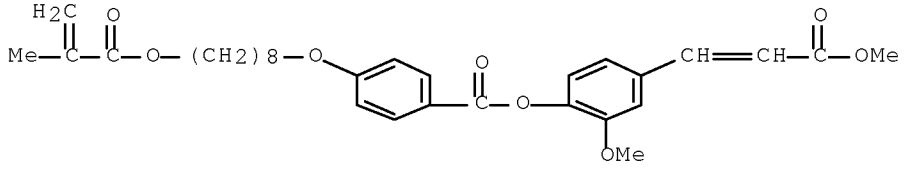
CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



IT 724731-94-6P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(crosslinkable, photoactive acrylic polymers and their use)
RN 724731-94-6 HCAPLUS
CN Benzoic acid, 4-[[8-[(2-methyl-1-oxo-2-propenyl)oxy]octyl]oxy]-, 2-methoxy-4-(3-methoxy-3-oxo-1-propenyl)phenyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

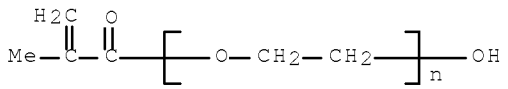
CM 1

CRN 724731-93-5
CMF C30 H36 O8



CM 2

CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



IC ICM C07D
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 42
IT 724731-96-8P 724772-73-0P
RL: IMF (Industrial manufacture); PREP (Preparation)
(crosslinkable, photoactive acrylic polymers and their use)
IT 724731-94-6P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(crosslinkable, photoactive acrylic polymers and their use)

L38 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:349203 HCAPLUS Full-text
DOCUMENT NUMBER: 136:348423
TITLE: Polarizing film
INVENTOR(S): Moia, Franco; Schadt, Martin; Seiberle, Hubert
PATENT ASSIGNEE(S): Rolic Ag, Switz.
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1203967	A1	20020508	EP 2000-811027	20001103
			<--	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
WO 2002037147	A1	20020510	WO 2001-CH645	20011101
			<--	
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001095368	A	20020515	AU 2001-95368	20011101
			<--	
PRIORITY APPLN. INFO.:			EP 2000-811027 A	20001103

<--
WO 2001-CH645 W
200111
01
<--

AB The polarizer film consists of a transfer foil and a polarizer comprising a liquid crystal polymer (LCP) layer with dichroic mols. in it, and a layer of linearly photo-polymerizable material (LPP) in contact with the LPP layer, functioning as an alignment layer for the LPP layer. The polarizer film can be transfered to a substrate, for instance by hot-stamping, without losing its polarizing properties. It is possible to manufacture uniform as well as high and/or low information content structured polarizers. The invention particularly simplifies off-line manufacturing of polarizers and improves in many applications the mounting process of the polarizers into the final product.

IT 188956-85-6
RL: TEM (Technical or engineered material use); USES (Uses)
(linearly photo-polymerizable material used as alignment layer in polarizer film)

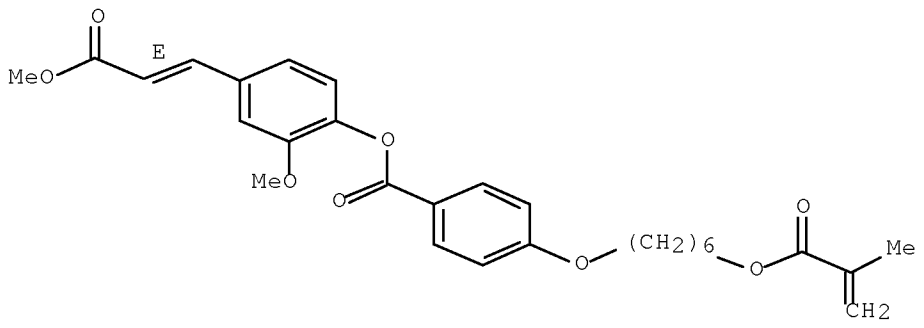
RN 188956-85-6 HCAPLUS

CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propen-1-yl]phenyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 188956-71-0
CMF C28 H32 O8

Double bond geometry as shown.



IC ICM G02B005-30
ICS G02F001-1335

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 188956-85-6
RL: TEM (Technical or engineered material use); USES (Uses)
(linearly photo-polymerizable material used as alignment layer in polarizer film)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:237104 HCAPLUS Full-text
DOCUMENT NUMBER: 136:270700
TITLE: Liquid crystal orientation film and manufacture thereof
INVENTOR(S): Sakai, Takeya; Uetsuki, Masao; Kawatsuki, Yoshihiro
PATENT ASSIGNEE(S): Hayashi Telempu Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002090750	A	20020327	JP 2000-282915	200009 19 <--

PRIORITY APPLN. INFO.: JP 2000-282915 200009
19
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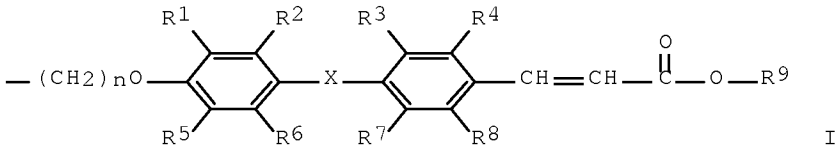
GI



I

AB The process comprises the steps of (1) a photopolymerizable polymer having a side chain represented by I (n = 1-12; X = COO, OCO, NN, etc.; R1-8 = H, halo, alkyloxy, etc.; R9 = alkyl, fluorinated alkyl) on a substrate, and irradiating with light.

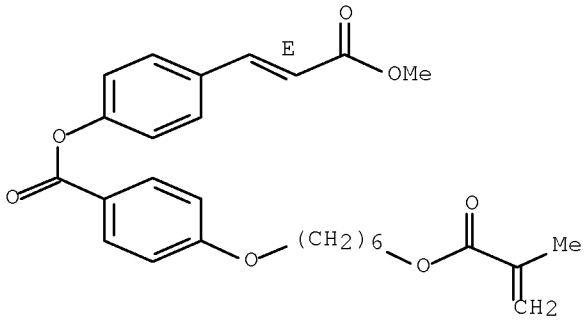
IT 341548-51-4
RL: FMU (Formation, unclassified); TEM (Technical or engineered material use); FORM (Formation, nonpreparative); USES (Uses)
(manufacture of Liquid crystal orientation film)

RN 341548-51-4 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]-, 4-[(1E)-3-methoxy-3-oxo-1-propenyl]phenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 188956-78-7
CMF C27 H30 O7

Double bond geometry as shown.



IC ICM G02F001-1337
ICS C08F002-48
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 341548-51-4
RL: FMU (Formation, unclassified); TEM (Technical or engineered material use); FORM (Formation, nonpreparative); USES (Uses)
(manufacture of Liquid crystal orientation film)

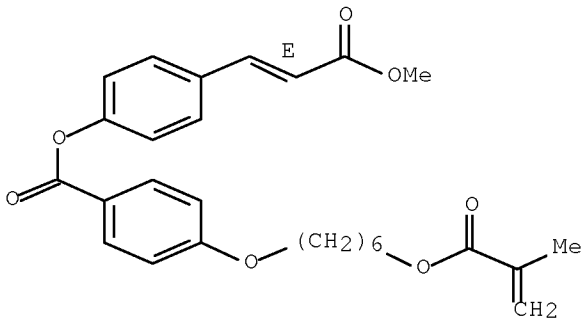
L38 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:205293 HCAPLUS Full-text
DOCUMENT NUMBER: 135:12017
TITLE: Thermally stable photoalignment layer of a novel photocrosslinkable polymethacrylate for liquid crystal display
AUTHOR(S): Kawatsuki, Nobuhiro; Takatsuka, Hirohumi; Yamamoto, Tohei
CORPORATE SOURCE: Department of Applied Chemistry, Himeji Institute of Technology, Himeji, 671-2201, Japan
SOURCE: Japanese Journal of Applied Physics, Part 2: Letters (2001), 40(3A), L209-L211
CODEN: JAPLD8; ISSN: 0021-4922
PUBLISHER: Japan Society of Applied Physics
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Photoreactions and thermal stability are studied of photoalignment layer based on a polymethacrylate containing Me 4-(4'- hexyloxy)benzoyloxy-cinnamate side group. The axis-selective photoreaction of the cinnamoyl group induced a neg. dichroism, while the photo-Fries rearrangement caused a small pos. one. The neg. dichroism became pos. when the film was annealed at 150° as a result of self-organization of the side groups, and the annealing treatment at 210° did not change its spectroscopic characteristics. The nematic LC was aligned on the exposed films in a direction parallel to the elec. vector of linearly polarized UV light and the alignment layer showed thermal durability of the orientational characteristics of the liquid crystal up to 200°.
IT 341548-51-4
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)
(PBMC 6; photoreactions and thermal stability of polymethacrylate containing (hexyloxy)benzoyloxycinnamate side group and its application as photoalignment layer for liquid crystal displays)
RN 341548-51-4 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]-, 4-[(1E)-3-methoxy-3-oxo-1-propenyl]phenyl ester, homopolymer (9CI)

(CA INDEX NAME)

CM 1

CRN 188956-78-7
CMF C27 H30 O7

Double bond geometry as shown.



CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 341548-51-4
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)
(PBMC 6; photoreactions and thermal stability of polymethacrylate containing (hexyloxy)benzoyloxycinnamate side group and its application as photoalignment layer for liquid crystal displays)
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:421422 HCAPLUS Full-text
DOCUMENT NUMBER: 133:51327
TITLE: Orientation layer for liquid-crystal display device
INVENTOR(S): Funfschilling, Jurg; Stalder, Martin; Schadt, Martin
PATENT ASSIGNEE(S): Rolic Ag, Switz.
SOURCE: PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000036463	A1	20000622	WO 1999-IB1938	19991206

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W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,

ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

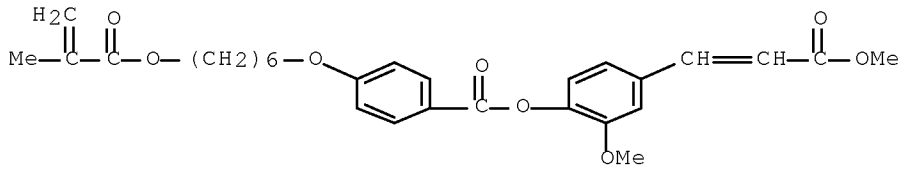
EP 1147452	A1	20011024	EP 1999-956284	199912 06 <--
EP 1147452	B1	20040818		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002532755	T	20021002	JP 2000-588646	199912 06 <--
AT 274198	T	20040915	AT 1999-956284	199912 06 <--
IN 2001MN00546	A	20050617	IN 2001-MN546	200105 09 <--
US 6597422	B1	20030722	US 2001-868035	200106 14 <--
HK 1037238	A1	20050107	HK 2001-108131	200111 19 <--
PRIORITY APPLN. INFO.:			GB 1998-27540 A	199812 15 <--
			GB 1998-28283 A	199812 22 <--
			WO 1999-IB1938 W	199912 06 <--

AB A liquid-crystal display device comprising a ferroelec. liquid crystal material aligned by a liquid crystal polymer network layer under 20 nm thick, which itself is aligned by a photooriented linearly photopolymd. layer under 20 nm thick, exhibits a low voltage drop over the aligning layer and has a remarkable contrast ratio.

IT 232941-79-6
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(ferroelec. liquid-crystal display device aligned by liquid crystal polymer network layer aligned by photooriented layer of)

RN 232941-79-6 HCAPLUS

CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-methoxy-4-(3-methoxy-3-oxo-1-propen-1-yl)phenyl ester (CA INDEX NAME)



IC ICM G02F001-1337
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 232941-79-6
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(ferroelec. liquid-crystal display device aligned by liquid crystal polymer network layer aligned by photooriented layer of)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:487359 HCAPLUS Full-text
DOCUMENT NUMBER: 131:123060
TITLE: photocrosslinkable liquid crystal composition for optical device
INVENTOR(S): Benecke, Carsten; Buchecker, Richard; Marck, Guy
PATENT ASSIGNEE(S): Rolic A.-G., Switz.
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9937735	A1	19990729	WO 1999-IB136	19990126
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W: CN, JP, KR, SG, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1051454	A1	20001115	EP 1999-900272	19990126
			<--	
EP 1051454	B1	20040310		
R: CH, DE, FR, GB, LI				
JP 2002501111	T	20020115	JP 2000-528643	19990126
			<--	
US 6548127	B1	20030415	US 2000-601101	200007

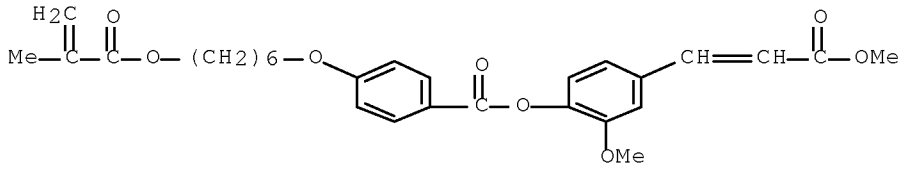
27
<--
HK 1032416 A1 20040903 HK 2001-103136
200105
03
<--
PRIORITY APPLN. INFO.: CH 1998-193 A
199801
27
<--
WO 1999-IB136 W
199901
26
<--

AB A photocrosslinkable liquid crystal composition for use in the fabrication of an optical or electrooptical device comprises two or more liquid-crystalline monomers each having at least two terminal polymerizable groups and at least one non-liquid-crystalline monomer having at most one alicyclic or aromatic structural unit and at least one terminal polymerizable group.

IT 232941-79-6
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(liquid-crystal display devices with orientation layers prepared from irradiated)

RN 232941-79-6 HCAPLUS

CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-methoxy-4-(3-methoxy-3-oxo-1-propen-1-yl)phenyl ester (CA INDEX NAME)



IC ICM C09K019-38

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 73, 75

IT 232941-79-6
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(liquid-crystal display devices with orientation layers prepared from irradiated)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:299274 HCAPLUS Full-text
DOCUMENT NUMBER: 126:277904
ORIGINAL REFERENCE NO.: 126:53887a,53890a
TITLE: Curable, photosensitive arylacrylate polymers
INVENTOR(S): Herr, Rolf-Peter; Herzog, Francois; Schuster, Andreas

PATENT ASSIGNEE(S): Rolic Ag, Switz.
SOURCE: Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 763552	A2	19970319	EP 1996-114275	19960906
			<--	
EP 763552	A3	19980401		
EP 763552	B1	20010919		
R: CH, DE, FR, GB, IT, LI, NL				
US 6107427	A	20000822	US 1996-708333	19960904
			<--	
JP 09118717	A	19970506	JP 1996-238711	19960910
			<--	
JP 4011652	B2	20071121		
CN 1151411	A	19970611	CN 1996-111550	19960914
			<--	
CN 1109053	C	20030521		
HK 1011035	A1	20020104	HK 1998-112206	19981121
			<--	
US 6335409	B1	20020101	US 2000-614185	20000711
			<--	

PRIORITY APPLN. INFO.:	CH 1995-2615	A	19950915
			<--
	CH 1996-664	A	19960313
			<--
	US 1996-708333	A3	19960904
			<--

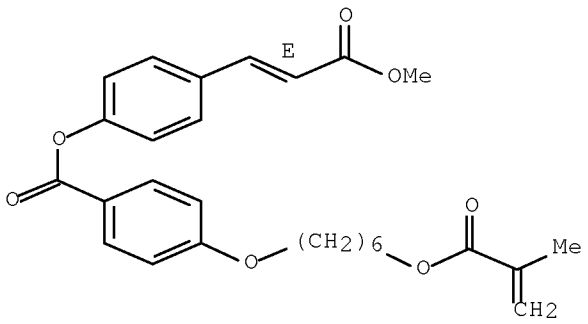
AB The title polymers, useful as orienting layers for liquid crystals and in optical elements and laminates, are composed of blocks of specified structure and have terminal 3-arylacrylate ester groups. Reaction of 59 mmol Me (E)-3-(4-hydroxyphenyl)acrylate (I) with 65 mmol methacryloyl chloride in THF containing Et3N and 4-(dimethylamino)pyridine at 15-23° gave 10.3 g I methacrylate (II). AIBN-initiated polymerization of 0.5 g II in THF at 60° gave 0.37 g polymer with glass temperature 145° and UV absorption maximum 275.2 nm.

IT 188956-79-8P
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(curable, photosensitive arylacrylate polymers)
RN 188956-79-8 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]-, 4-(3-methoxy-3-oxo-1-propenyl)phenyl ester, (E)-, polymer with 2-ethylhexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

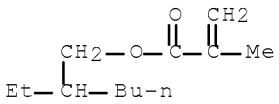
CRN 188956-78-7
CMF C27 H30 O7

Double bond geometry as shown.



CM 2

CRN 688-84-6
CMF C12 H22 O2

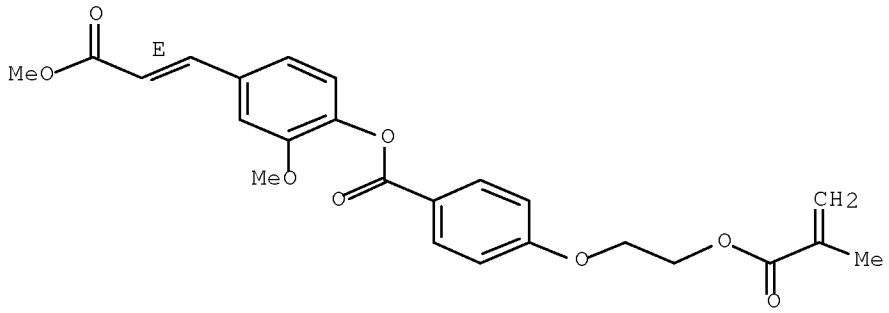


IT 188956-84-5P 188956-85-6P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(curable, photosensitive arylacrylate polymers)
RN 188956-84-5 HCAPLUS
CN Benzoic acid, 4-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]-, 2-methoxy-4-(3-methoxy-3-oxo-1-propenyl)phenyl ester, (E)-, polymer with (E)-2-methoxy-4-(3-methoxy-3-oxo-1-propenyl)phenyl 4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]benzoate (9CI) (CA INDEX NAME)

CM 1

CRN 188956-83-4
CMF C24 H24 O8

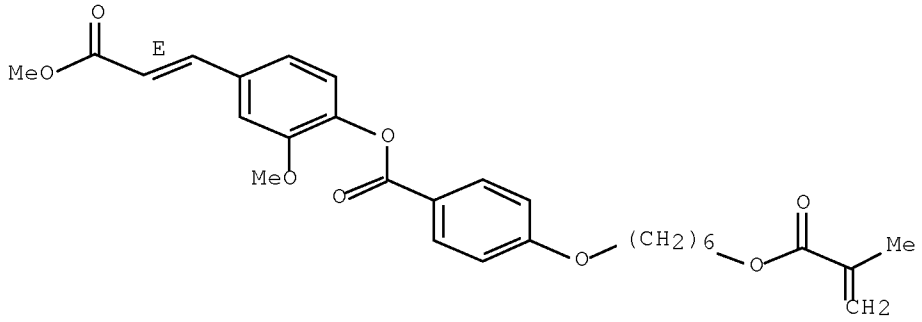
Double bond geometry as shown.



CM 2

CRN 188956-71-0
CMF C28 H32 O8

Double bond geometry as shown.

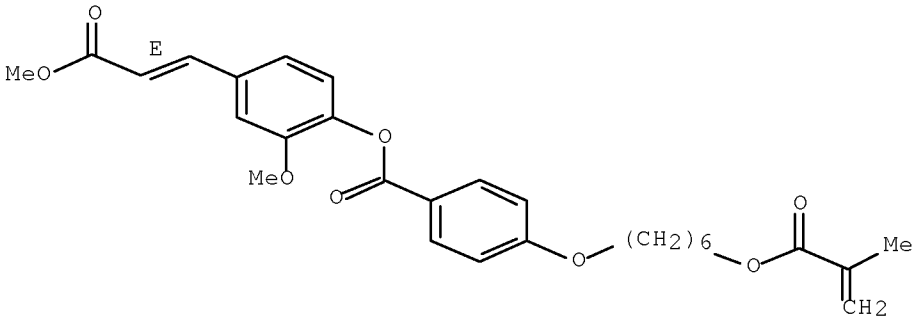


RN 188956-85-6 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propen-1-yl]phenyl ester, homopolymer (CA INDEX NAME)

CM 1

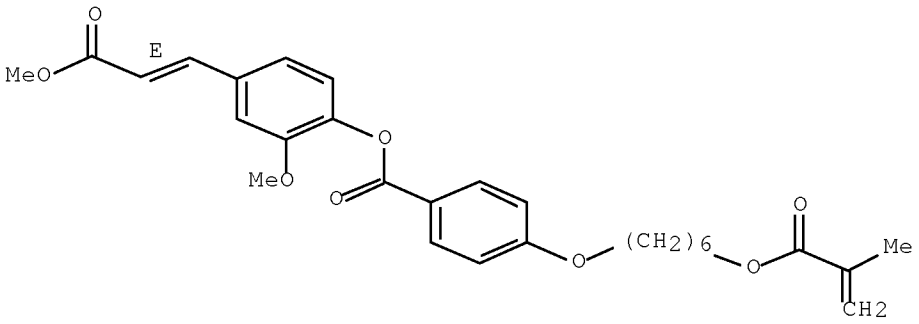
CRN 188956-71-0
CMF C28 H32 O8

Double bond geometry as shown.



IT 188956-71-0P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of)
RN 188956-71-0 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-, 2-methoxy-4-[(1E)-3-methoxy-3-oxo-1-propen-1-yl]phenyl ester (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C08F246-00
ICS C08F220-34; C08F220-30; C09K019-38; C07C069-92
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 74, 75
IT 3943-97-3DP, reaction products with poly(hydroxyethyl methacrylate) 25249-16-5DP, Poly(2-hydroxyethyl methacrylate), reaction products with Me (hydroxyphenyl)acrylate 187837-86-1P 188956-70-9P 188956-74-3P 188956-79-8P 188956-81-2P
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(curable, photosensitive arylacrylate polymers)
IT 188956-84-5P 188956-85-6P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(curable, photosensitive arylacrylate polymers)
IT 156807-00-0P 156807-03-3P 188956-71-0P 188956-72-1P 188956-73-2P 188956-80-1P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of)

L38 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:112573 HCAPLUS Full-text
DOCUMENT NUMBER: 118:112573
ORIGINAL REFERENCE NO.: 118:19453a,19456a
TITLE: Nonlinear optical polymeric films and their formation
INVENTOR(S): Herr, Rolf Peter; Schadt, Martin; Schmitt, Klaus
PATENT ASSIGNEE(S): Hoffmann-la Roche, F., A.-G., Switz.
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

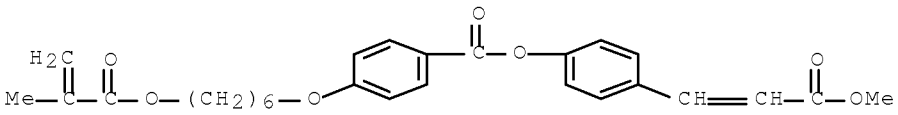
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 492216	A1	19920701	EP 1991-120958	199112 06
			<--	
EP 492216	B1	19951011		
R: CH, DE, FR, GB, IT, LI, NL				
US 5447662	A	19950905	US 1991-809991	199112 18
			<--	
JP 04303827	A	19921027	JP 1991-338919	199112 20
			<--	
JP 2865917	B2	19990308		
PRIORITY APPLN. INFO.:			CH 1990-4101 A	199012 21
			<--	

AB Polymeric films with optically nonlinear or anisotropic properties, which are bounded by surfaces with centrosym. or isotropic structures or with differing optical properties, comprise polymers with optically nonlinear and/or mesogenic side chains which can be photocrosslinked under conditions (e.g., in the presence of elec. or magnetic fields, etc.) which cause orientation of the films. The film preparation entails illuminating (optionally patternwise) polymer films applied to a substrate while applying an elec. field.

IT 146283-61-6
RL: USES (Uses)
(nonlinear optical films based on)
RN 146283-61-6 HCAPLUS
CN Benzoic acid, 4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]-, 4-cyanophenyl ester, polymer with 4-(3-methoxy-3-oxo-1-propenyl)phenyl 4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]benzoate and 4-methoxyphenyl 4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]benzoate (9CI) (CA INDEX NAME)

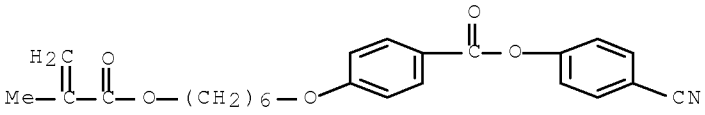
CM 1

CRN 146283-60-5
CMF C27 H30 O7



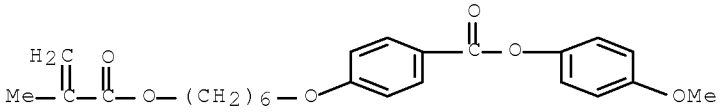
CM 2

CRN 69260-35-1
CMF C24 H25 N O5



CM 3

CRN 65718-64-1
CMF C24 H28 O6



IC ICM G02F001-01
CC 73-10 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38, 75
IT 146283-61-6
RL: USES (Uses)
(nonlinear optical films based on)

L38 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1983:55091 HCAPLUS Full-text
DOCUMENT NUMBER: 98:55091
ORIGINAL REFERENCE NO.: 98:8495a,8498a
TITLE: Fire-resistant resin compositions
PATENT ASSIGNEE(S): Daiichi Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 57137329	A	19820824	JP 1981-23404	198102 18 <--
JP 63046773	B	19880919		

PRIORITY APPLN. INFO.: JP 1981-23404 198102 18 <--

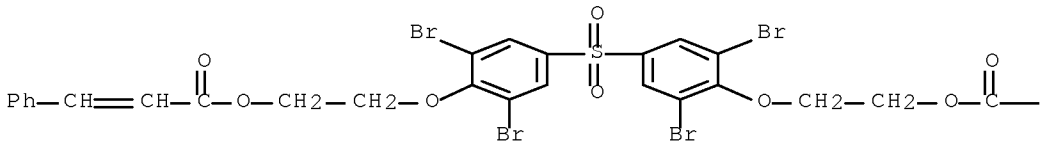
AB Resins are fireproofed by cinnamates of oxyalkylated halobisphenols. Thus, esterification of tetrabromobishenol A bis(hydroxyethyl) ether with PhCH:CHCO2H gave the dicinnamate (I) [84333-61-9]. A mixture of ethylene glycol-maleic anhydride-phthalic anhydride copolymer [27837-75-8] 100, styrene 10, I 40, BzOOBu-tert 2, and Co naphthenate 2 parts was cured at 80° for 2 h to give a molding with fire resistance rating (UL 94) V-O, bending strength 38 kg/mm2, and excellent water resistance.

IT 84333-63-1
RL: USES (Uses)
(fireproofing agent, for plastics)

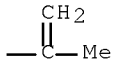
RN 84333-63-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[2,6-dibromo-4-[[3,5-dibromo-4-[2-[(1-oxo-3-phenyl-2-propenyl)oxy]ethoxy]phenyl]sulfonyl]phenoxy]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC C08K005-10
ICA C07C043-225; C08F220-22; C08F299-02; C08G065-32
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 25, 42
IT 84333-61-9 84333-62-0 84333-63-1 84333-64-2
RL: USES (Uses)
(fireproofing agent, for plastics)

=> d ibib abs hitstr hitind l39 1-30

L39 ANSWER 1 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:547732 HCAPLUS Full-text
DOCUMENT NUMBER: 141:113994
TITLE: Cellulose acylate cast films, their manufacture,

and optical films, photographic films, and liquid crystal displays therewith
INVENTOR(S): Kato, Eiichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 42 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004188679	A	20040708	JP 2002-357248	20021209 <--

PRIORITY APPLN. INFO.: JP 2002-357248 20021209 <--

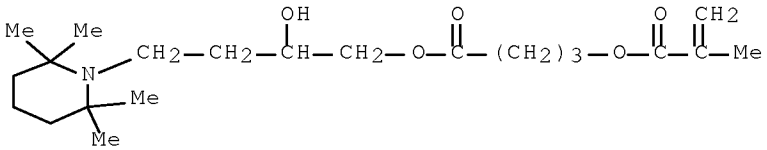
AB The films are cast products of cellulose acylate dopes containing radical monomers and photothermal-converting polymerization initiators Dn-(K+)n (D = anionic group-containing near-IR-absorbing dye; K+ = onium ion; n = 1-4). Photog. films having supports comprised of the cast films with 30-250-μm thickness, optical films, and LCD having the cast films are also claimed.

IT 718640-50-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(high-durability cellulose acylate cast films for photog. film supports, polarizer protective films, and LCD constituents)

RN 718640-50-7 HCAPLUS
CN Butanoic acid, 4-[(2-methyl-1-oxo-2-propenyl)oxy]-, 2-hydroxy-4-(2,2,6,6-tetramethyl-1-piperidinyl)butyl ester, polymer with cyclooctylmethyl 2-methyl-2-propenoate, 2-[[3-hydroxy-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 2-cyano-3-(4-methoxyphenyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

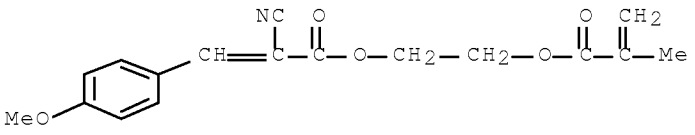
CRN 658060-05-0
CMF C21 H37 N O5



CM 2

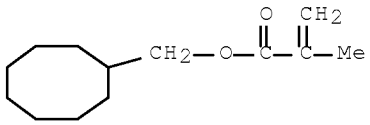
CRN 658060-04-9

CMF C17 H17 N O5



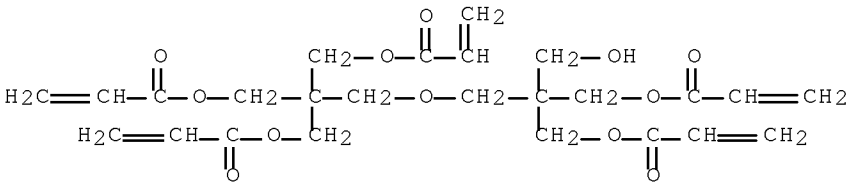
CM 3

CRN 152950-93-1
CMF C13 H22 O2



CM 4

CRN 60506-81-2
CMF C25 H32 O12



IC ICM B29C041-24
ICS C08F002-44; C08F251-02; C08J005-18; G02B005-30; G02F001-1335; G03C001-795; B29K001-00; B29L007-00; C08L001-12

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST cellulose acylate cast film durability improved; TAC film radical polymer hybridized photog support; photothermal converting polymn catalyst cellulose acylate film

IT Polymerization catalysts
(near-IR-absorbing, photothermal converting; high-durability cellulose acylate cast films for photog. film supports, polarizer protective films, and LCD constituents)

IT 9011-14-7P, Poly(methyl methacrylate) 99732-63-5P 658059-79-1P 658059-81-5P 658059-84-8P 658060-13-0P 676265-33-1P 718640-37-0P 718640-46-1P 718640-49-4P 718640-50-7P 718640-51-8P 718640-56-3P 718640-59-6P 718640-67-6P 718640-71-2P 719277-43-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered

material use); PREP (Preparation); USES (Uses)
(high-durability cellulose acylate cast films for photog. film supports, polarizer protective films, and LCD constituents)

IT 718640-28-9 718640-32-5 718640-35-8 718640-41-6 718640-44-9
718640-54-1 718640-62-1 718640-65-4 719277-37-9 719277-40-4
RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)
(polymerization catalysts; high-durability cellulose acylate cast films for photog. film supports, polarizer protective films, and LCD constituents)

L39 ANSWER 2 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:510523 HCAPLUS Full-text
DOCUMENT NUMBER: 141:79428
TITLE: Cellulose acylate films with good mechanical strengths, optical properties, and storage stability and its optical films, displays, and silver halide photography films
INVENTOR(S): Kato, Eiichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 60 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004176025	A	20040624	JP 2002-351268	20021203 <--
PRIORITY APPLN. INFO.:			JP 2002-285611	A 20020930 <--

AB The cellulose acylate films are fabricated by solvent casting and light irradiation of cellulose acylate compns. containing monofunctional macromonomers with Mw ≤2 + 104, represented by the general formula TL[CHb1C(V0R)b2] ([] shows repeating unit; T = polymerizable group-containing functional group; V0 = CO2, CH2CO2, O, CONHCO2, CONHCO, SO2, CO, CONQ1, SO2NQ1, phenylene; Q1 = H, C1-8 aliphatic group; b1, b2 = H, halo, CN, alkyl, CH2CO2R10; R10 = alkyl; L = group linking V0 with the repeating unit []; R = aliphatic, aryl, heterocyclic group), monomers A, and photopolymn. initiators. Preferably, the compns. further contain monomers B bearing light-stabilizing groups and polyfunctional monomers C bearing ≥2 polymerizable groups. The cellulose acylate films are useful for polarizer protection films and retardation films for LCD, antireflection films for PDP, Ag halide photog. film supports, etc.

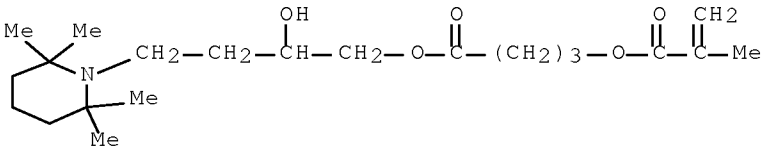
IT 710973-68-5P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(cellulose acylate films containing copolymers of macromonomers for optical films, displays, and silver halide photog. films)

RN 710973-68-5 HCAPLUS
CN Butanoic acid, 4-[(2-methyl-1-oxo-2-propenyl)oxy]-, 2-hydroxy-4-(2,2,6,6-tetramethyl-1-piperidinyl)butyl ester, polymer

with ethenylbenzene, 2-[[3-hydroxy-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 2-cyano-3-(4-methoxyphenyl)-2-propenoate, graft (9CI) (CA INDEX NAME)

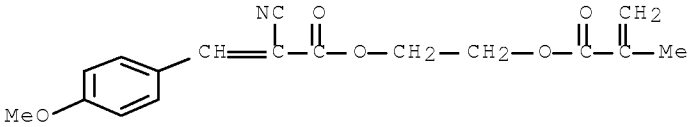
CM 1

CRN 658060-05-0
CMF C21 H37 N O5



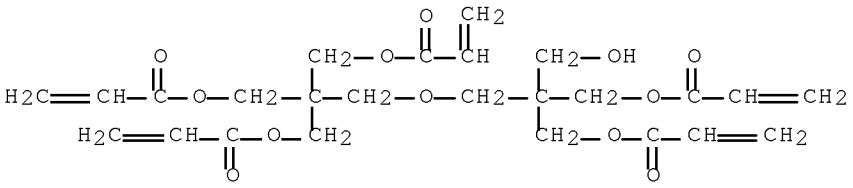
CM 2

CRN 658060-04-9
CMF C17 H17 N O5



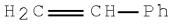
CM 3

CRN 60506-81-2
CMF C25 H32 O12



CM 4

CRN 100-42-5
CMF C8 H8



IC ICM C08F290-00
ICS C08J005-18; G03C001-795; C08L001-10
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 73
ST cellulose acylate polyester macromonomer compn optical film; triacetyl cellulose macromonomer compn optical film; light stabilizer hindered amine polymer optical film; polarizer cellulose acylate film; retarder cellulose acylate film; photog film support cellulose acylate film
IT Amines, uses
RL: MOA (Modifier or additive use); USES (Uses)
(hindered, polymers, light stabilizers; cellulose acylate films containing copolymers of macromonomers for optical films, displays, and silver halide photog. films)
IT 138128-39-9P, Methyl acrylate-methyl methacrylate graft copolymer
710973-11-8P 710973-16-3P 710973-22-1P 710973-26-5P
710973-31-2P 710973-36-7P 710973-42-5P 710973-47-0P
710973-52-7P 710973-58-3P 710973-63-0P 710973-68-5P
710973-72-1P 710973-77-6P 710973-81-2P 710973-86-7P
710973-91-4P 710973-96-9P 710974-02-0P 710974-06-4P
710974-12-2P 711027-84-8P 711027-85-9P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(cellulose acylate films containing copolymers of macromonomers for optical films, displays, and silver halide photog. films)

L39 ANSWER 3 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:492719 HCAPLUS Full-text
DOCUMENT NUMBER: 141:62033
TITLE: Cellulose acylate films for optical uses, their manufacture, and liquid crystal displays and photographic films employing the same
INVENTOR(S): Kato, Eiichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004168905	A	20040617	JP 2002-336954	20021120
			<--	
PRIORITY APPLN. INFO.:			JP 2002-336954	20021120
			<--	

AB Cellulose acylate dopes containing photopolymn. macromol. initiators TL1D1(OE1OCOE2CO)nR1 or TL2D2(OCE1CO2E2O)nR2 [T = dithiocarbamato, xanthato; L1, L2 = bivalent bridging group; E1, E2 = bivalent aliphatic and/or aromatic group; D1 = CH2, CO; D2 = O, NH; R1 = OH, OR5, NR6R7 (R5 = C1-12 hydrocarbyl;

R6, R7 = H, C1-12 hydrocarbyl); R2 = H, C1-12 hydrocarbyl, COR8, CONHR9 (R8, R9 = C1-12 hydrocarbyl)], and radical monomers are cast and exposed to light to form the claimed films. The dopes may contain light-stable monomers and multifunctional monomers. LCD employing the films are also claimed. Photog. films having supports comprising 30-250-μm-thick films obtained as above, are further claimed. The films show improved flexural strength, storage stability, transparency, and tear strength.

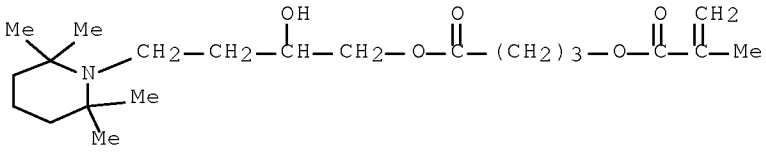
IT 708212-24-2P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)

RN 708212-24-2 HCAPLUS

CN 4,7-Methano-1H-indene-5,6-dicarboxylic acid, octahydro-, polymer with 1,6-hexanediol, 2-[[3-hydroxy-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2-hydroxy-4-(2,2,6,6-tetramethyl-1-piperidinyl)butyl 4-[(2-methyl-1-oxo-2-propenyl)oxy]butanoate and 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 2-cyano-3-(4-methoxyphenyl)-2-propenoate (9CI) (CA INDEX NAME)

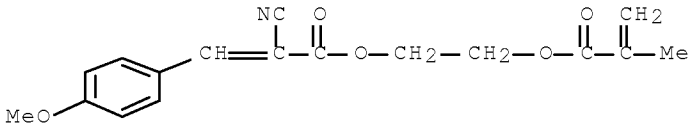
CM 1

CRN 658060-05-0
CMF C21 H37 N O5



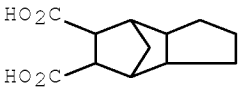
CM 2

CRN 658060-04-9
CMF C17 H17 N O5



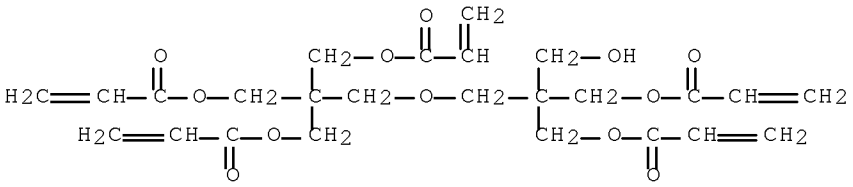
CM 3

CRN 168196-18-7
CMF C12 H16 O4



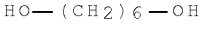
CM 4

CRN 60506-81-2
CMF C25 H32 O12



CM 5

CRN 629-11-8
CMF C6 H14 O2



IC ICM C08F002-44
ICS C08F002-50; C08F251-02; C08J005-18; G02B005-30; G03C001-795; C08L001-12

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 73

ST cellulose acylate film diblock polymer strengthened; photog polarizer optical film cellulose acetate; dithiocarbamate xanthate terminated macroinitiator cellulose acylate dope; tear flexural resistant cellulose cast optical film

IT Polyesters, preparation
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic, block, diblock; tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)

IT Macromonomers
RL: CAT (Catalyst use); IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(dithiocarbamate- or xanthate-terminated; tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)

IT Polarizers
(elliptic; tear-resistant cellulose acylate films containing

radically-polymerized block copolymers for optical uses)
IT Polymerization catalysts
(macromonomers; tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)
IT Polymerization catalysts
(photopolymn., macromol.; tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)
IT Optical instruments
(retarders; tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)
IT Casting of polymeric materials
Liquid crystal displays
Optical films
Photographic films
(tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)
IT 708212-00-4P 708212-01-5P 708212-02-6P 708212-03-7P
708212-04-8P 708212-05-9P 708212-06-0P 708212-07-1P
708212-08-2P 708212-09-3P 708212-10-6P 708212-11-7P
708212-13-9P 708212-44-6P 708213-71-2P 708215-35-4P
708271-47-0P 708271-53-8P 708271-73-2P 708271-75-4P
708271-91-4P 708272-22-4DP, reaction products with pentylamine
708272-25-7P 708272-57-5P 708272-72-4P 708272-75-7P
708272-80-4P 708272-84-8P 708272-86-0P 708272-89-3P
708273-03-4P 708273-08-9P 708273-14-7P 708273-48-7DP, Bu ether
708274-50-4P 708274-68-4P 708274-94-6DP, Me ether 708274-96-8P
RL: CAT (Catalyst use); IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(macromol. initiators; tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)
IT 79-41-4DP, Methacrylic acid, diblock polymers 80-62-6DP, Methyl methacrylate, diblock polymers 105-08-8DP, 1,4-Cyclohexanedimethanol, diblock polymers 108-30-5DP, Succinic anhydride, diblock polymers 3066-71-5DP, diblock polymers 3971-31-1DP, 1,3-Cyclohexanedicarboxylic acid, diblock polymers 676353-20-1DP, diblock polymers 708212-12-8P
708212-14-0P 708212-15-1P 708212-16-2P 708212-17-3P
708212-18-4P 708212-19-5P 708212-20-8P 708212-21-9P
708212-22-0P 708212-23-1P 708212-24-2P 708212-25-3P
708212-26-4P 708212-28-6P 708212-29-7P 708212-30-0P
708212-31-1P 708212-32-2P 708212-33-3P 708212-34-4P
708212-35-5P 708212-38-8P 708212-40-2P 708212-43-5P
708212-45-7P 708274-97-9P, 1,6-Hexanediol-glutaric anhydride-methyl methacrylate diblock copolymer 708275-31-4P
708275-33-6P 708275-34-7P 708275-35-8P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)
IT 9012-09-3, Cellulose triacetate
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)

L39 ANSWER 4 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:432933 HCAPLUS Full-text
DOCUMENT NUMBER: 140:431323
TITLE: Cellulose acylate films, their manufacture, and optical sheets, polarizers, liquid crystal displays, and silver halide photographic materials using them
INVENTOR(S): Kato, Eiichi; Moto, Takahiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 66 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004148811	A	20040527	JP 2003-349004	20031008
			<--	
PRIORITY APPLN. INFO.:			JP 2002-294914 A	20021008
			<--	

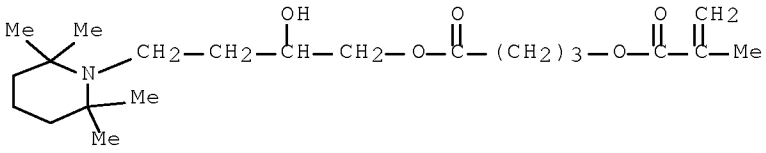
AB The films, showing good tear strength, moisture impermeability, and storage stability and low dependence of retardation on temperature and moisture, are manufactured by casting compns. containing cellulose acylates, radically polymerizable monomers bearing cycloaliph. hydrocarbon groups, and photopolymn. initiators and irradiating them with lights.

IT 693274-50-9P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of cellulose acylate films with good storage stability and low dependence of retardation on temperature and moisture for optical films, polarizers, and photog. films)

RN 693274-50-9 HCAPLUS
CN Butanoic acid, 4-[(2-methyl-1-oxo-2-propenyl)oxy]-, 2-hydroxy-4-(2,2,6,6-tetramethyl-1-piperidinyl)butyl ester, polymer with 2-[[3-hydroxy-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 2-cyano-3-(4-methoxyphenyl)-2-propenoate and tricyclo[3.3.1.13,7]dec-1-yl 2-propenoate (9CI) (CA INDEX NAME)

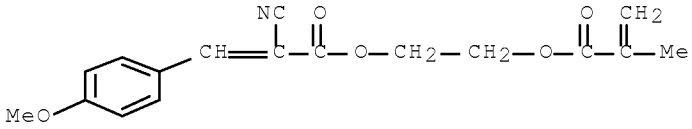
CM 1

CRN 658060-05-0
CMF C21 H37 N O5



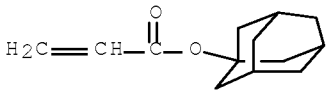
CM 2

CRN 658060-04-9
CMF C17 H17 N O5



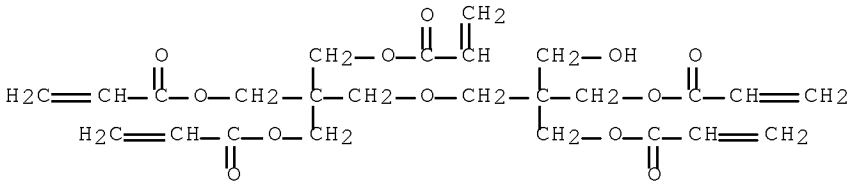
CM 3

CRN 121601-93-2
CMF C13 H18 O2



CM 4

CRN 60506-81-2
CMF C25 H32 O12



IC ICM B29C041-24
ICS G02B005-30; G02F001-1335; G03C001-795; B29K001-00; B29L007-00
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT Polymerization catalysts
(photopolymn.; manufacture of cellulose acylate films with good storage stability and low dependence of retardation on temperature and

moisture for optical films, polarizers, and photog. films)

IT 99732-63-5P 658059-80-4P 658059-82-6P 658060-11-8P
658060-13-0P 658060-20-9P 658063-12-8P 658063-14-0P
676265-38-6P 676265-41-1P 693274-42-9P 693274-43-0P
693274-44-1P 693274-45-2P 693274-46-3P 693274-47-4P
693274-49-6P 693274-50-9P 693274-51-0P 693274-52-1P
693287-19-3P 693287-22-8P 693287-25-1P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of cellulose acylate films with good storage stability and low dependence of retardation on temperature and moisture for optical films, polarizers, and photog. films)

L39 ANSWER 5 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:351517 HCAPLUS Full-text
DOCUMENT NUMBER: 140:383173
TITLE: Cellulose acylate films, their manufacture, and optical films, liquid crystal displays, and photographic materials employing the same
INVENTOR(S): Kato, Eiichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004130674	A	20040430	JP 2002-297744	20021010

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PRIORITY APPLN. INFO.: JP 2002-297744 20021010

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AB Cellulose acylate dopes containing macromol. photopolymn. initiators TL[CHA1CA2(V1R)] [T = SC:SNR11R12, SC:SOR13 (R11, R12 = H, hydrocarbyl; R13 = hydrocarbyl); L = bivalent bridging group; A1, A2 = H, halo, cyano, alkyl, CH2CO2Q2 (Q2 = alkyl); V1 = CO2, OCO, CH2OCO, etc.; R = aliphatic or aromatic group] and radical monomers are cast on supports and exposed to light to form films with high tear strength and excellent transparency for the title mentioned uses. Monomers having light-stabilized groups may be incorporated in the said monomers. The films for photog. film supports have thickness 30-250 μm.

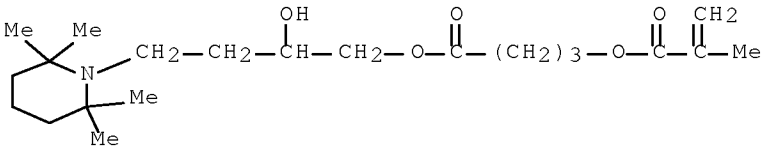
IT 684282-29-9P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of cellulose acylate films having excellent tear strength and transparency for optical, photog., and display uses)

RN 684282-29-9 HCAPLUS
CN Butanoic acid, 4-[(2-methyl-1-oxo-2-propenyl)oxy]-, 2-hydroxy-4-(2,2,6,6-tetramethyl-1-piperidinyl)butyl ester, polymer with cyclohexyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate,

2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 2-cyano-3-(4-methoxyphenyl)-2-propenoate and octahydro-4,7-methano-1H-inden-5-yl 2-propenoate, block (9CI) (CA INDEX NAME)

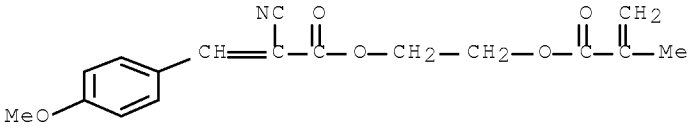
CM 1

CRN 658060-05-0
CMF C21 H37 N O5



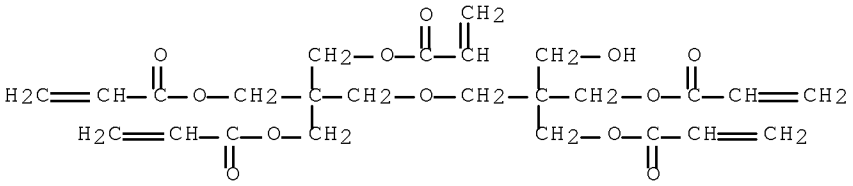
CM 2

CRN 658060-04-9
CMF C17 H17 N O5



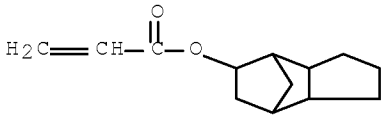
CM 3

CRN 60506-81-2
CMF C25 H32 O12



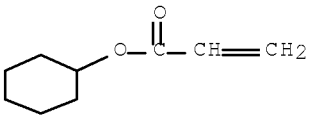
CM 4

CRN 7398-56-3
CMF C13 H18 O2



CM 5

CRN 3066-71-5
CMF C9 H14 O2



IC ICM B29C041-28
ICS B29C041-50; C08F002-44; C08F002-50; C08F251-02; C08J005-18; G02B005-30; G03C001-795; B29K001-00; B29L007-00; C08L001-12

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 73

IT Casting of polymeric materials
Liquid crystal displays
Optical films
Polarizers
(manufacture of cellulose acylate films having excellent tear strength and transparency for optical, photog., and display uses)

IT Polymerization catalysts
(photopolymn., macromol.; manufacture of cellulose acylate films having excellent tear strength and transparency for optical, photog., and display uses)

IT 80-62-6DP, Methyl methacrylate, block polymers with light-stabilized monomers and macromol. initiators 96-33-3DP, Methyl acrylate, block polymers with light-stabilized monomers 101-43-9DP, Cyclohexyl methacrylate, block polymers with light-stabilized monomers 142-09-6DP, Hexyl methacrylate, block polymers with light-stabilized monomers and macromol. initiators 110506-07-5DP, 4-Trifluoromethylphenyl methacrylate, block polymers with light-stabilized monomers and macromol. initiators 111404-23-0DP, block polymers with light-stabilized monomers 121601-93-2DP, 1-Adamantyl acrylate, block polymers with light-stabilized monomers and macromol. initiators 134291-01-3P, Cyclohexyl methacrylate-methyl methacrylate block copolymer 684282-17-5P 684282-18-6P 684282-19-7P 684282-20-0P 684282-21-1P, Cyclohexyl methacrylate-vinyl acetate-styrene block copolymer 684282-23-3P 684282-24-4P 684282-25-5P 684282-26-6P 684282-27-7P 684282-28-8P 684282-29-9P 684282-30-2P 684282-31-3P 684282-32-4P 684282-33-5P 684282-34-6P 684282-35-7P 684282-36-8P 684282-37-9P 684282-38-0P 684282-39-1P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of cellulose acylate films having excellent tear strength and transparency for optical, photog., and display uses)

L39 ANSWER 6 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:271645 HCAPLUS Full-text
DOCUMENT NUMBER: 140:294934
TITLE: Cellulose acylate composite films, their manufacture, and their uses in optical films, liquid crystal displays, and photographic materials
INVENTOR(S): Kato, Eiichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 48 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004099775	A	20040402	JP 2002-264588	20020910

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PRIORITY APPLN. INFO.: JP 2002-264588 20020910

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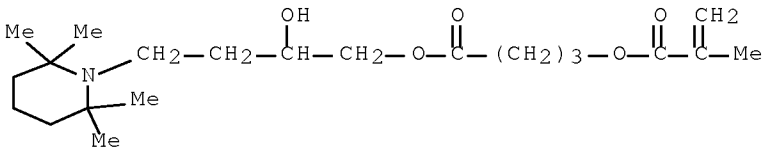
AB The films are manufactured by casting cellulose acylate compns. containing radically-polymerizable monomers, cationically- polymerizable monomers, and photopolymn. initiators and irradiating the compns. with electron beam (sic). Also claimed are optical films and liquid crystal displays using the films and Ag halide photog. materials using the films with thickness 30-250 μm as supports. The films show low haze, high tear strength, good weatherability, and neither contamination with foreign substances nor stains. A polarizer film prepared by laminating both sides of an iodine-adsorbed PVA-based polarizer with a pair of the composite cellulose triacetate films shows high durability.

IT 676265-29-5P
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(manufacture of cellulose acylate films for LCD, photog. materials, etc., from dopes containing radically-polymerizable monomers, cationically-polymerizable monomers, and photoinitiators)

RN 676265-29-5 HCAPLUS
CN Butanoic acid, 4-[(2-methyl-1-oxo-2-propenyl)oxy]-, 2-hydroxy-4-(2,2,6,6-tetramethyl-1-piperidinyl)butyl ester, polymer with cyclohexylmethyl 2-methyl-2-propenoate and 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 2-cyano-3-(4-methoxyphenyl)-2-propenoate (9CI) (CA INDEX NAME)

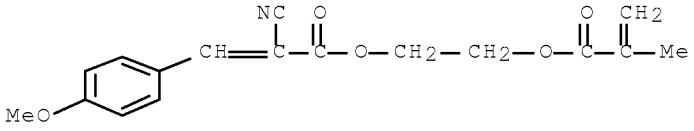
CM 1

CRN 658060-05-0
CMF C21 H37 N O5



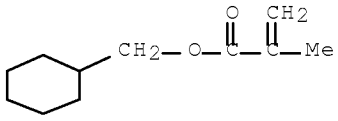
CM 2

CRN 658060-04-9
CMF C17 H17 N O5



CM 3

CRN 16868-16-9
CMF C11 H18 O2



IC ICM C08G085-00
ICS B29C041-24; C08J005-18; C08L001-10; C08L101-00; G03C001-795; B29K001-00; B29L007-00

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 43, 73

ST cellulose acylate film dope radically polymerizable monomer; cationically polymerizable monomer cellulose acylate film dope; optical film cellulose triacetate dope monomer photoinitiator; liq crystal display composite cellulose acylate film; photog material composite cellulose acylate film

IT Casting of polymeric materials
(film; manufacture of cellulose acylate films for LCD, photog. materials, etc., from dopes containing radically-polymerizable monomers, cationically-polymerizable monomers, and photoinitiators)

IT Optical films
Polarizing films
(manufacture of cellulose acylate films for LCD, photog. materials, etc., from dopes containing radically-polymerizable monomers, cationically-polymerizable monomers, and

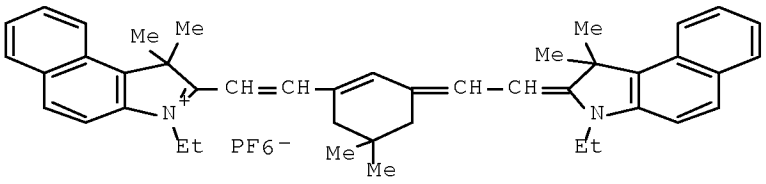
photoinitiators)
IT Liquid crystal displays
(optical compensation films for; manufacture of cellulose acylate films for LCD, photog. materials, etc., from dopes containing radically-polymerizable monomers, cationically-polymerizable monomers, and photoinitiators)
IT Polymerization catalysts
(photopolymn.; manufacture of cellulose acylate films for LCD, photog. materials, etc., from dopes containing radically-polymerizable monomers, cationically-polymerizable monomers, and photoinitiators)
IT Optical instruments
(retarders, for liquid crystal displays; manufacture of cellulose acylate films for LCD, photog. materials, etc., from dopes containing radically-polymerizable monomers, cationically-polymerizable monomers, and photoinitiators)
IT Photographic films
(supports; manufacture of cellulose acylate films for LCD, photog. materials, etc., from dopes containing radically-polymerizable monomers, cationically-polymerizable monomers, and photoinitiators)
IT 947-19-3 3584-23-4 10409-07-1 12099-10-4 58162-30-4
62051-09-6 66482-55-1 71868-10-5 75482-18-7 81877-48-7
127279-74-7 157692-55-2
RL: CAT (Catalyst use); USES (Uses)
(initiator; manufacture of cellulose acylate films for LCD, photog. materials, etc., from dopes containing radically-polymerizable monomers, cationically-polymerizable monomers, and photoinitiators)
IT 9011-14-7P, Methyl methacrylate homopolymer 25085-98-7P
26283-70-5P, Hydrogenated bisphenol A diglycidyl ether homopolymer
99732-63-5P 658059-80-4P 658059-82-6P 658059-84-8P
658059-86-0P 658060-14-1P 658060-20-9P 658060-24-3P
658060-26-5P 658063-14-0P 676265-21-7P 676265-23-9P
676265-25-1P 676265-27-3P 676265-28-4P 676265-29-5P
676265-31-9P 676265-33-1P 676265-34-2P 676265-38-6P
676265-41-1P 676265-43-3P 676265-45-5P 676265-48-8P
676265-49-9P 676265-51-3P 676266-16-3P 676266-18-5P
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(manufacture of cellulose acylate films for LCD, photog. materials, etc., from dopes containing radically-polymerizable monomers, cationically-polymerizable monomers, and photoinitiators)
IT 9004-34-6D, Cellulose, acylates 9012-09-3, Cellulose triacetate
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(manufacture of cellulose acylate films for LCD, photog. materials, etc., from dopes containing radically-polymerizable monomers, cationically-polymerizable monomers, and photoinitiators)

L39 ANSWER 7 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:217309 HCAPLUS Full-text
DOCUMENT NUMBER: 140:254613
TITLE: Cellulose acylate films, their manufacture, and their uses in optical films, liquid crystal

displays, and photographic materials
INVENTOR(S): Kato, Eiichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 47 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004083799	A	20040318	JP 2002-249041	20020828
			<--	
PRIORITY APPLN. INFO.:			JP 2002-249041	20020828
			<--	

OTHER SOURCE(S): MARPAT 140:254613
GI



I

AB The films are manufactured by casting cellulose acylate compns. containing radically polymerizable monomers, near-IR sensitizers, and photopolymn. initiators and irradiating with near-IR. Thus, a film was manufactured from a dope containing cellulose triacetate, a plasticizer, SiO2 microparticles, a UV absorber, sensitizer I, tetrabutylammonium 2,4,6-trifluorotetraphenylborate, and N-phenylglycine. The film showed good releasability, low haze, high tear strength, no contamination, and good resistance to weathering and storage at high temperature and humidity.

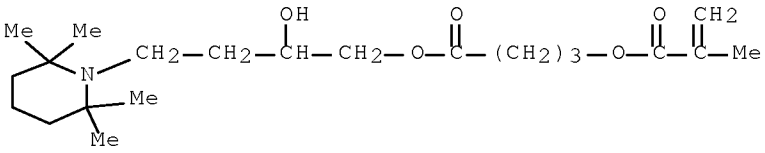
IT 658060-06-1P
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(manufacture of cellulose acylate films from dopes containing monomers, near-IR sensitizers, and photopolymn. initiators)

RN 658060-06-1 HCAPLUS
CN Butanoic acid, 4-[(2-methyl-1-oxo-2-propenyl)oxy]-, 2-hydroxy-4-(2,2,6,6-tetramethyl-1-piperidinyl)butyl ester, polymer with cyclooctylmethyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 2-cyano-3-(4-methoxyphenyl)-

2-propenoate (9CI) (CA INDEX NAME)

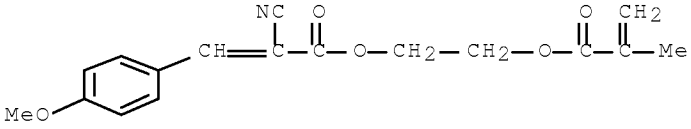
CM 1

CRN 658060-05-0
CMF C21 H37 N O5



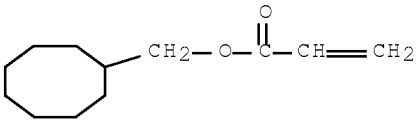
CM 2

CRN 658060-04-9
CMF C17 H17 N O5



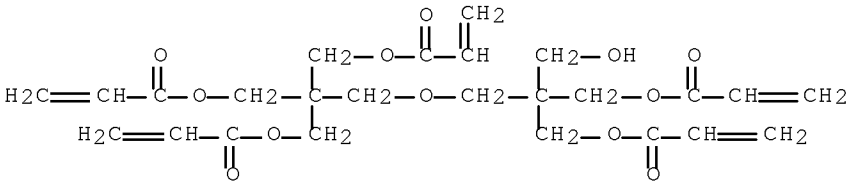
CM 3

CRN 654072-00-1
CMF C12 H20 O2



CM 4

CRN 60506-81-2
CMF C25 H32 O12



IC ICM C08J005-18
ICS B29C041-24; C08F002-44; C08F002-46; C08F251-02; G02B005-30; G02F001-1335; G02F001-1336; G03C001-795; B29K001-00; B29L007-00; C08L001-10
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 73, 74
IT Casting of polymeric materials
Liquid crystal displays
Optical films
Photographic films
(manufacture of cellulose acylate films from dopes containing monomers, near-IR sensitizers, and photopolymn. initiators)
IT Polymerization catalysts
(photopolymn.; manufacture of cellulose acylate films from dopes containing monomers, near-IR sensitizers, and photopolymn. initiators)
IT 9011-14-7P, Poly(methyl methacrylate) 99732-63-5P 658059-80-4P
658059-82-6P 658059-84-8P 658059-89-3P 658059-91-7P
658059-97-3P 658060-00-5P 658060-03-8P 658060-06-1P
658060-09-4P 666837-41-8P 671233-68-4P 671233-70-8P
671233-72-0P 671233-73-1P 671233-75-3P 671234-43-8P
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(manufacture of cellulose acylate films from dopes containing monomers, near-IR sensitizers, and photopolymn. initiators)

L39 ANSWER 8 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:180035 HCAPLUS Full-text
DOCUMENT NUMBER: 140:243664
TITLE: Cellulose acylate films with excellent transparency, tear strength, and weather resistance, their manufacture, and optical films, liquid crystal displays, and silver halide photographic materials using them
INVENTOR(S): Kato, Eiichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004067816	A	20040304	JP 2002-227579	20020805 <--

PRIORITY APPLN. INFO.: JP 2002-227579 20020805 <--

AB The films are manufactured by casting cellulose acylate compns. containing polymerizable monomers, photothermal converting agents, and thermal polymerization initiators and irradiating them with IR.

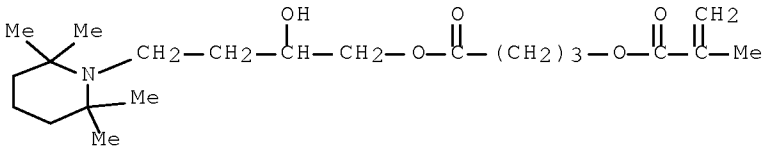
IT 658060-06-1P
RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of cellulose acylate cast films with good transparency, tear strength, and weather resistance for optical use)

RN 658060-06-1 HCAPLUS

CN Butanoic acid, 4-[(2-methyl-1-oxo-2-propenyl)oxy]-, 2-hydroxy-4-(2,2,6,6-tetramethyl-1-piperidinyl)butyl ester, polymer with cyclooctylmethyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 2-cyano-3-(4-methoxyphenyl)-2-propenoate (9CI) (CA INDEX NAME)

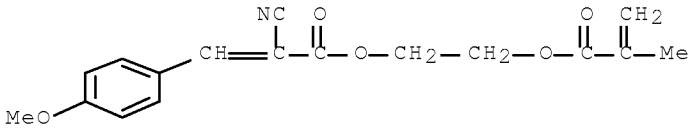
CM 1

CRN 658060-05-0
CMF C21 H37 N O5



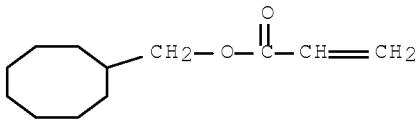
CM 2

CRN 658060-04-9
CMF C17 H17 N O5



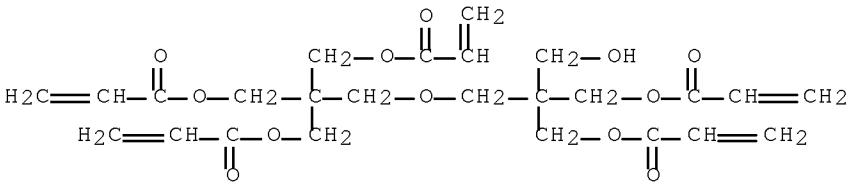
CM 3

CRN 654072-00-1
CMF C12 H20 O2



CM 4

CRN 60506-81-2
CMF C25 H32 O12



IC ICM C08J005-18
ICS B29C041-28; B29C041-50; C08F002-44; C08F251-02; G02B005-30; G02F001-1335; G03C001-795; B29K001-00; B29L007-00; C08L001-10
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 73
IT Polymerization catalysts
(photopolymn.; manufacture of cellulose acylate cast films with good transparency, tear strength, and weather resistance for optical use)
IT 2495-35-4DP, polymers 9011-14-7P, Methyl methacrylate polymer 16868-15-8DP, polymers 40756-50-1P 59620-20-1DP, polymers 72355-89-6P 99732-63-5P 119347-00-1DP, polymers 128611-70-1DP, polymers 151543-64-5P, Poly(1,4-cyclohexanedimethanol divinyl ether) 658059-80-4P 658059-82-6P 658059-84-8P 658059-86-0P 658059-89-3P 658059-91-7P 658059-97-3P 658060-00-5P 658060-03-8P 658060-06-1P 658060-09-4P 658060-36-7P 658060-38-9DP, polymers 666837-41-8P 666837-45-2P 666837-46-3P 666837-47-4P 666837-48-5P 666837-49-6P 666837-50-9P 666837-51-0P 666837-52-1P 666837-53-2P 666837-56-5DP, reaction products with monoepoxide 666837-57-6DP, reaction products with epoxy resin 666841-65-2P 666841-66-3P
RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of cellulose acylate cast films with good transparency, tear strength, and weather resistance for optical use)

L39 ANSWER 9 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:117562 HCAPLUS Full-text
DOCUMENT NUMBER: 140:189907
TITLE: Cellulose acylate films, their manufacture, optical films, liquid-crystal displays, and silver halide photographic materials
INVENTOR(S): Kato, Eiichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 61 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2004042381	A	20040212	JP 2002-201749 <--	200207 10
PRIORITY APPLN. INFO.:			JP 2002-201749 <--	200207 10

OTHER SOURCE(S): MARPAT 140:189907

AB The films are manufactured by (1) applying cellulose acylate compns. containing polymerizable monomers, photopolymn. initiators, and spectral sensitizers Ar1R3C:CR2C(:X)R1 [R1-R3 = H, monovalent nonmetal atomic group; R1-R3 may form acidic nucleus of dyes; Ar1 = aryl group having OR4, NR5, and/or SR6 at o- or p-position; X = O, S, :NR7; R4-R7 = (un)substituted alkyl or aryl] and (2) irradiating with UV light. The photog. materials have supports of the films with thickness 30-250 μm. The films show high bending and tear strength and good storage stability.

IT 658060-06-1P

RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

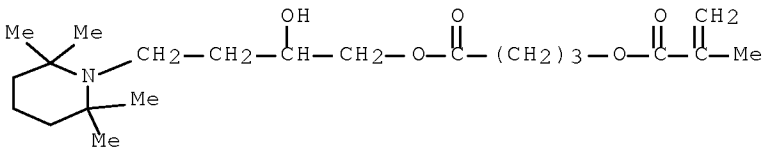
(manufacture of cellulose acylate films with high tear strength for LCD and photog. materials)

RN 658060-06-1 HCAPLUS

CN Butanoic acid, 4-[(2-methyl-1-oxo-2-propenyl)oxy]-, 2-hydroxy-4-(2,2,6,6-tetramethyl-1-piperidinyl)butyl ester, polymer with cyclooctylmethyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 2-cyano-3-(4-methoxyphenyl)-2-propenoate (9CI) (CA INDEX NAME)

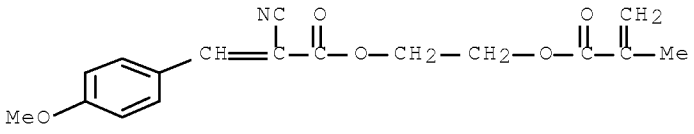
CM 1

CRN 658060-05-0
CMF C21 H37 N O5



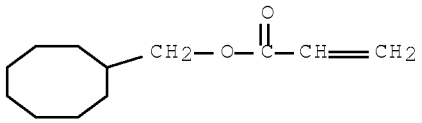
CM 2

CRN 658060-04-9
CMF C17 H17 N O5



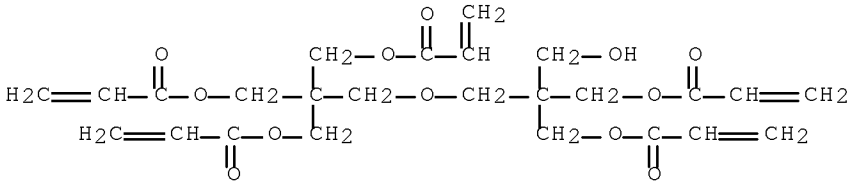
CM 3

CRN 654072-00-1
CMF C12 H20 O2



CM 4

CRN 60506-81-2
CMF C25 H32 O12



IC ICM B29C041-24
ICS B29C041-50; C08F002-44; C08F002-50; C08F251-02; C08J005-18; G02B005-30; G02F001-1335; B29K001-00; B29L007-00; C08L001-10

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 73

IT 9011-14-7P, Methyl methacrylate homopolymer 99732-63-5P
658059-80-4P 658059-82-6P 658059-84-8P 658059-85-9P
658059-86-0P 658059-89-3P 658059-91-7P 658059-94-0P
658059-97-3P 658060-00-5P 658060-03-8P 658060-06-1P
658060-09-4P 658060-11-8P 658060-13-0P 658060-14-1P
658060-16-3P 658060-18-5P 658060-20-9P 658060-21-0P
658060-23-2P 658060-24-3P 658060-26-5P 658060-30-1P
658060-33-4P 658060-36-7P 658060-40-3P 658060-43-6P
658063-12-8P 658063-14-0P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of cellulose acylate films with high tear strength for LCD and photog. materials)

L39 ANSWER 10 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:100945 HCAPLUS Full-text
DOCUMENT NUMBER: 134:168064
TITLE: Sunblocking polymers and their novel formulations
PATENT ASSIGNEE(S): Biophysica, Inc., USA
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001008647	A1	20010208	WO 1999-US17350	19990729
			<--	
W: AU, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9952473	A	20010219	AU 1999-52473	19990729
			<--	
EP 1198220	A1	20020424	EP 1999-937690	19990729
			<--	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
PRIORITY APPLN. INFO.:			WO 1999-US17350 A	19990729
			<--	

OTHER SOURCE(S): MARPAT 134:168064

AB Novel polymeric biol. inert compns. and their intermediates, as well as sunscreen formulations comprising them and making them invisible, are provided for broad range protection from UV radiation. Acrylic polymers comprising at least two different UV absorbing moieties having different light absorbing ranges are employed in conjunction with other monomers to provide sunscreen polymers as microparticles. The polymer microparticles, once imbibed with carrier compds., change the refractive index, thus providing invisible sunscreen formulations which offer enhanced protection without adverse physiol. effects. Polymerization was carried out using 30.83 g UV-A monomer 4-methacryloxydibenzoyl methane, 29.04 g UV-B monomer N-[2-(4'-dimethylaminobenzoyl)oxypropyl] methacrylamide, 31.13 g UV-C monomer 4-methoxy-N-[1-(4-methacryloxyphenyl)] benzamide, 9.76 g 2-hydroxyethyl methacrylate, 1.73 g N,N-methylene bisacrylamide, and 500 mL methanol. After flushing with argon, 0.951 g of 2,'2-azobis butyronitrile was added along with 250 mL of MeOH. After stirring at 60° for 20 h, the sunscreen polymer was filtered, washed with methanol, and vacuum dried to a mass of 90.66 g. The sunscreen polymer was formulated into a cream by mixing 1.38 g lanolin, 300 mg vitamin E acetate, 1.476 g copra oil, 180 mg Dow Corning 2503 and 180 mg white petrolatum together with 2.4 g of the polymer prepared and 120 mg titanium dioxide. When applied to the skin, the cream film takes a grayish-white color which becomes transparent over about 15-20 min. Since the particles are in the range of 1 μ in size, transfer into the skin and underlying strata is prevented.

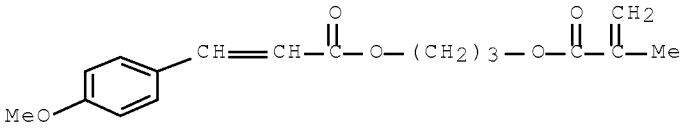
IT 295782-60-4P
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and formulation of sunscreen acrylic polymers)

RN 295782-60-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 3-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

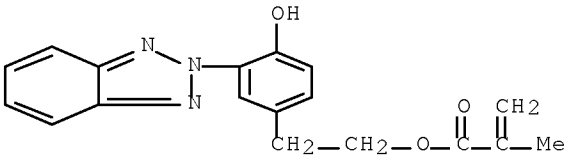
CM 1

CRN 295782-59-1
CMF C17 H20 O5



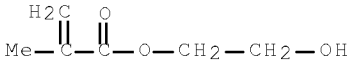
CM 2

CRN 96478-09-0
CMF C18 H17 N3 O3



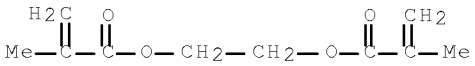
CM 3

CRN 868-77-9
CMF C6 H10 O3



CM 4

CRN 97-90-5
CMF C10 H14 O4



IC ICM A61K007-42
CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 35
ST acrylic polymer sunscreen
IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(calendula; preparation and formulation of sunscreen acrylic polymers)
IT Polysiloxanes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(di-Me, Me stearyl, Dow Corning 2503; preparation and formulation of sunscreen acrylic polymers)
IT Calendula
(oil; preparation and formulation of sunscreen acrylic polymers)
IT Microparticles
Sunscreens
UV A radiation
UV B radiation
UV C radiation
(preparation and formulation of sunscreen acrylic polymers)
IT Coconut oil
Lanolin
Paraffin oils
Petrolatum
Polysiloxanes, biological studies
Tocopherols
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(preparation and formulation of sunscreen acrylic polymers)
IT Acrylic polymers, biological studies
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and formulation of sunscreen acrylic polymers)
IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(vegetable; preparation and formulation of sunscreen acrylic polymers)
IT 50-81-7, Ascorbic acid, biological studies 58-95-7, Vitamin E acetate 621-82-9D, Cinnamic acid, esters 1314-13-2, Zinc oxide, biological studies 13463-67-7, Titanium oxide, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(preparation and formulation of sunscreen acrylic polymers)
IT 79-10-7DP, Acrylic acid, esters, polymers 157174-87-3P 295782-58-0P 295782-60-4P 324747-89-9P 324747-90-2P 324747-92-4P 324747-93-5P
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and formulation of sunscreen acrylic polymers)
IT 62-53-3, Aniline, reactions 93-58-3, Methyl benzoate 99-93-4, 4-Hydroxyacetophenone 100-07-2, p-Anisoyl chloride 110-87-2,

Dihydropyran 123-30-8, p-Hydroxy aniline 141-43-5, Ethanolamine, reactions 150-13-0, 4-Aminobenzoic acid 619-84-1, 4-Dimethylaminobenzoic acid 814-68-6, Acryloyl chloride 868-77-9, 2-Hydroxyethyl methacrylate 920-46-7, Methacryloyl chloride 1137-41-3, 4-Aminobenzophenone 1147-43-9, 2-Aminobenzophenone-2'-carboxylic acid 7646-67-5, N-2-Hydroxyethyl acrylamide 17581-85-0, 4-Methoxycinnamyl alcohol 19243-95-9, p-Hydroxymethacrylanilide 21442-01-3, N-[2-Hydroxypropyl methacrylamide] 34446-64-5, 4-Methoxycinnamic acid chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and formulation of sunscreen acrylic polymers)

IT 4755-50-4P, 4-Dimethylaminobenzoyl chloride 15286-98-3P 16162-69-9P 22421-62-1P 23600-48-8P 52046-71-6P, 4-Hydroxydibenzoyl methane 79984-80-8P 96603-18-8P 130291-80-4P 157174-83-9P 157174-85-1P 157174-86-2P 157175-86-5P 157175-87-6P 157175-88-7P 157175-89-8P 295782-53-5DP, alkylated reaction products with hydroxyethyl methacrylate 295782-53-5P 295782-54-6P 324747-88-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and formulation of sunscreen acrylic polymers)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 11 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:680345 HCAPLUS Full-text
DOCUMENT NUMBER: 133:256572
TITLE: Sunblocking polymers and their novel formulations
INVENTOR(S): Sovak, Milos; Terry, Ronald C.; Douglass, James G., III; Bakir, Farid; Brown, Jason; Cugley, Peter
PATENT ASSIGNEE(S): Biophysica, Inc., USA
SOURCE: U.S., 10 pp., Cont.-in-part of U.S. Ser. No. 46,945, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6123928	A	20000926	US 1998-119836 <--	19980721
US 5487885	A	19960130	US 1993-164881 <--	19931209
US 5741924	A	19980421	US 1995-490316 <--	19950614
PRIORITY APPLN. INFO.:			US 1992-994426 B2	19921221

<--
US 1993-164881 A2
199312
09
<--
US 1995-490316 A2
199506
14
<--
US 1998-46945 B2
199803
23
<--

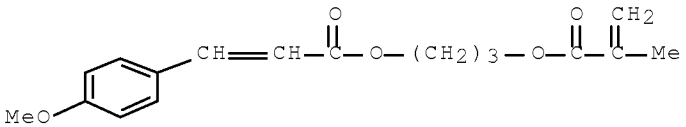
OTHER SOURCE(S): MARPAT 133:256572

AB Novel polymeric biol. inert compns. and their intermediates, as well as sunscreen formulations comprising them and making them invisible, are provided for broad range protection from UV radiation. Acrylic polymers comprising at least two different UV absorbing moieties having different light absorbing ranges are employed in conjunction with other monomers to provide sunscreen polymers as microparticles. The polymer microparticles, once imbibed with carrier compds., change the refractive index, thus providing invisible sunscreen formulations which offer enhanced protection without adverse physiol. effects. A 1 L flask was charged with 30.83 g 4-methacryloxydibenzoyl methane, 29.04 g N-[2-(4'-dimethylaminobenzoyl)oxypropyl] methacrylamide, 31.13 g 4-methoxy-N-[1-(4-methacryloxyphenyl)] benzamide, 9.76 g 2-hydroxyethylmethacrylate, 1.73 g N,N-methylene bisacrylamide, and 500 mL methanol. After flushing with argon, 0.951 g of 2,'2-azobisbutyronitrile was added along with 250 mL of MeOH. After stirring at 60° for 20 h the sunscreen polymer was filtered, washed with methanol, and vacuum dried to a mass of 90.66 g. Into a ball-grinder 1.38 g of lanolin, 300 mg of vitamin E acetate, 1.476 g of copra oil, 180 mg of silicone wax (Dow Corning 2503) and 180 mg of white petrolatum were added together with 2.4 g of the above polymer and 120 mg of titanium dioxide and were mixed at room temperature for 90 min to produce a sunscreen cream.

IT 295782-59-1
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(sunblocking polymers and their novel formulations)

RN 295782-59-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[[3-(4-methoxyphenyl)-1-oxo-2-propen-1-yl]oxy]propyl ester (CA INDEX NAME)



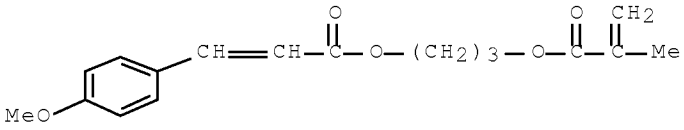
IT 295782-60-4P 295782-61-5P 295782-62-6P
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(sunblocking polymers and their novel formulations)

RN 295782-60-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 3-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

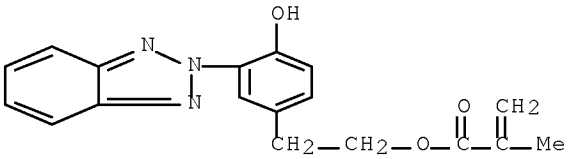
CM 1

CRN 295782-59-1
CMF C17 H20 O5



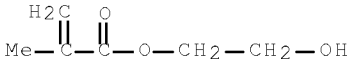
CM 2

CRN 96478-09-0
CMF C18 H17 N3 O3



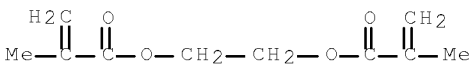
CM 3

CRN 868-77-9
CMF C6 H10 O3



CM 4

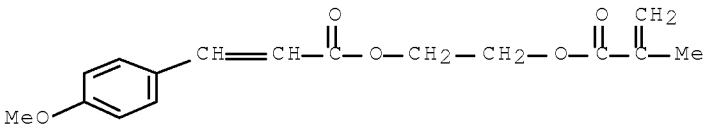
CRN 97-90-5
CMF C10 H14 O4



RN 295782-61-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

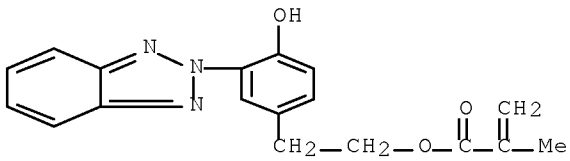
CM 1

CRN 107162-92-5
CMF C16 H18 O5



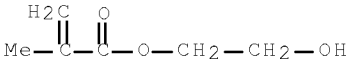
CM 2

CRN 96478-09-0
CMF C18 H17 N3 O3



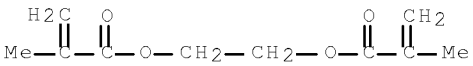
CM 3

CRN 868-77-9
CMF C6 H10 O3



CM 4

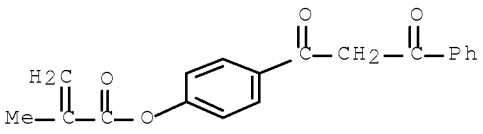
CRN 97-90-5
CMF C10 H14 O4



RN 295782-62-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 4-(1,3-dioxo-3-phenylpropyl)phenyl 2-methyl-2-propenoate and 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

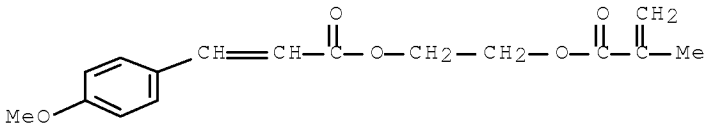
CM 1

CRN 157174-85-1
CMF C19 H16 O4



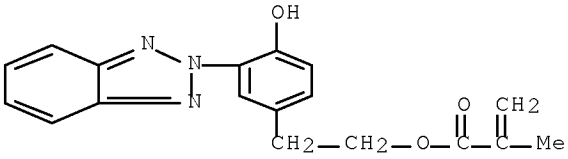
CM 2

CRN 107162-92-5
CMF C16 H18 O5



CM 3

CRN 96478-09-0
CMF C18 H17 N3 O3



IC ICM A61K007-42
ICS A61K007-44; A61K007-00; A61K031-78
INCL 424059000
CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 35, 38
ST sunblocking acrylic polymer cosmetic
IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(calendula; sunblocking polymers and their novel formulations)
IT Waxes
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(silicone; sunblocking polymers and their novel formulations)

IT Refractive index
Sunscreens
(sunblocking polymers and their novel formulations)
IT Coconut oil
Lanolin
Paraffin oils
Petrolatum
Polysiloxanes, biological studies
Tocopherols
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(sunblocking polymers and their novel formulations)
IT Acrylic polymers, biological studies
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(sunblocking polymers and their novel formulations)
IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(vegetable; sunblocking polymers and their novel
formulations)
IT 50-81-7, Ascorbic acid, biological studies 50-81-7D, Ascorbic
acid, derivs. 1314-13-2, Zinc oxide, biological studies
9003-01-4, Polyacrylic acid 13463-67-7, Titaniumoxide, biological
studies 96478-09-0 295782-59-1 295782-63-7
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(sunblocking polymers and their novel formulations)
IT 185811-85-2P 295782-54-6P 295782-57-9P 295782-58-0P
295782-60-4P 295782-61-5P 295782-62-6P
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(sunblocking polymers and their novel formulations)
IT 62-53-3, Benzenamine, reactions 93-58-3, Methyl benzoate
99-93-4, 4-Hydroxyacetophenone 100-07-2, p-Anisoyl chloride
123-30-8, p-Hydroxy aniline 124-63-0, Methanesulfonyl chloride
141-43-5, reactions 150-13-0, 4-Aminobenzoic acid 619-84-1,
4-Dimethylaminobenzoic acid 814-68-6, Acryloyl chloride.
868-77-9 920-46-7 923-26-2, 2-Hydroxypropyl methacrylate
1147-43-9, 2-Aminobenzophenone-2'-carboxylic acid 4755-50-4,
4-Dimethylaminobenzoyl chloride 7646-67-5, N-2-Hydroxyethyl
acrylamide 7719-09-7, Thionyl chloride 17581-85-0,
4-Methoxycinnamyl alcohol 19243-95-9 21442-01-3 25512-65-6,
Dihydropyran 34446-64-5, 4-Methoxycinnamic acid chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(sunblocking polymers and their novel formulations)
IT 15286-98-3P 16143-96-7P 23600-48-8P 52046-71-6P,
4-Hydroxydibenzoyl methane 295782-53-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT (Reactant or reagent)
(sunblocking polymers and their novel formulations)
IT 1137-41-3P, 4-Aminobenzophenone 22421-62-1P 56467-43-7P
79984-80-8P 96603-18-8P 130291-80-4P 157174-82-8P
157174-83-9P 157174-86-2P 157175-86-5P 157175-87-6P
157175-88-7P 157175-89-8P 295782-55-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(sunblocking polymers and their novel formulations)
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L39 ANSWER 12 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:779146 HCAPLUS Full-text
DOCUMENT NUMBER: 132:36200
TITLE: Cinnamate-containing photopolymer for orientation film of liquid crystal display (LCD) and method of forming the orientation film using the photopolymer
INVENTOR(S): Park, Jae Geun; Kim, Do Yun; Choi, Hwan Jae; Kim, Joo Young
PATENT ASSIGNEE(S): Samsung Display Devices Co., Ltd., S. Korea
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5998101	A	19991207	US 1997-951570 <--	19971016
US 6174649	B1	20010116	US 1998-189715 <--	19981111
PRIORITY APPLN. INFO.:			KR 1997-15556 A <--	19970425
			KR 1997-15557 A <--	19970425
			US 1997-951570 A2 <--	19971016
			US 1997-951882 B2 <--	19971016

AB The present invention provides novel photopolymers for use in liquid crystal display. The photopolymers are cinnamate-containing photopolymers wherein a mesogen, preferably containing a benzene ring, is introduced between a polyvinyl main chain and a cinnamate group, and also wherein the cinnamate group can be substituted with a cyanide group, an alkyl group, a halogen atom or a fluorocarbonyl group. The cinnamate-containing photopolymers have improved stability and photoelec. properties, and improved pre-tilt angle. The photopolymers can be used to form an orientation film for an LCD in a non-rubbing process, and can be used alone or with a crosslinking agent.

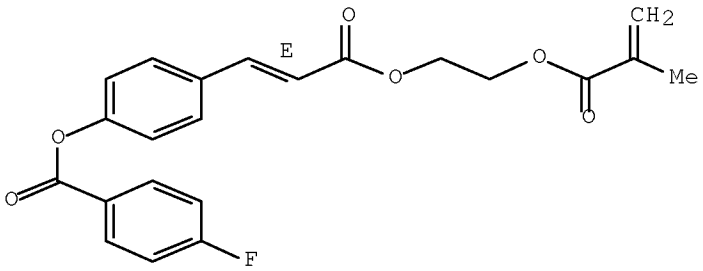
IT 252192-84-0P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(cinnamate-containing photopolymer for orientation film of liquid crystal display (LCD) and method of forming the orientation film

using the photopolymer)
RN 252192-84-0 HCAPLUS
CN Benzoic acid, 4-fluoro-, 4-[(1E)-3-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]-3-oxo-1-propenyl]phenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

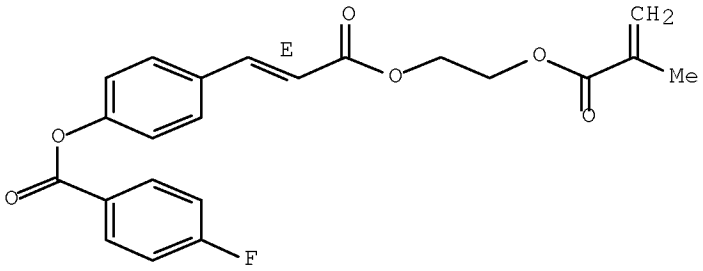
CRN 252192-83-9
CMF C22 H19 F O6

Double bond geometry as shown.



IT 252192-83-9P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(mesogen; cinnamate-containing photopolymer for orientation film of liquid crystal display (LCD) and method of forming the orientation film using the photopolymer)
RN 252192-83-9 HCAPLUS
CN Benzoic acid, 4-fluoro-, 4-[(1E)-3-[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethoxy]-3-oxo-1-propen-1-yl]phenyl ester (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C08F020-10
ICS C08F020-22; G02F001-1337
INCL 430321000
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 73, 76
IT Liquid crystal displays
Liquid crystals, polymeric
(cinnamate-containing photopolymer for orientation film of liquid crystal display (LCD) and method of forming the orientation film using the photopolymer)

IT 252192-84-0P 252237-50-6P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(cinnamate-containing photopolymer for orientation film of liquid crystal display (LCD) and method of forming the orientation film using the photopolymer)
IT 252192-82-8P, p-Fluorobenzoyloxy-(E)-cinnamoyl chloride 252192-83-9P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(mesogen; cinnamate-containing photopolymer for orientation film of liquid crystal display (LCD) and method of forming the orientation film using the photopolymer)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 13 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:594692 HCAPLUS Full-text
DOCUMENT NUMBER: 129:217038
ORIGINAL REFERENCE NO.: 129:44127a,44130a
TITLE: Photocrosslinkable polymers and their use
INVENTOR(S): Buchecker, Richard; Marck, Guy; Schuster, Andreas; Seiberle, Hubert
PATENT ASSIGNEE(S): Rolic A.-G., Switz.
SOURCE: Eur. Pat. Appl., 45 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 860455	A2	19980826	EP 1998-810111	19980212
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EP 860455	A3	19981104		
EP 860455	B1	20080604		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
SG 74615	A1	20000822	SG 1998-376	19980220
			<--	
CN 1194996	A	19981007	CN 1998-107705	19980223
			<--	
CN 1124297	C	20031015		
JP 10310613	A	19981124	JP 1998-40837	19980223
			<--	
US 20020061996	A1	20020523	US 2001-915574	200107

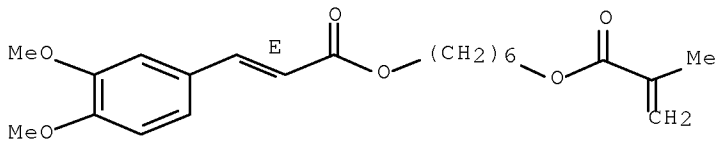
27
<--
US 6632909 B2 20031014
PRIORITY APPLN. INFO.: EP 1997-102973 A
199702
24
<--
US 1998-27862 A1
199802
23
<--

AB Styrenic polymers have backbones of acrylic, vinyl ether, vinyl ester, styrenic, and/or siloxane units, ≥50% of which have side chains (1 or 2 different types) with the structure Q(YZ)p(Y1Z1)nY2CX:CX1COL(CH2)rL1(CH2)s- [L = O, NR; L1 = direct link, O, CO2, O2C, NR, NRCO, CONR, NRCO2, O2CNR, NRCONR, CH:CH, C.tplbond.C; Q = H, F, Cl, CN, NO2, organic group; R = H, lower alkyl; X, X1 = H, F, Cl, CN, C1-12 (fluoro)alkyl; Y = (un)substituted phenylene, 2,5-pyridinediyl, 2,5-pyrimidinediyl, 1,3-dioxane-2,5-diyl, 1,4-cyclohexanediyl, 1,4-piperidinediyl, 1,4-piperazinediyl; Y1 = (un)substituted phenylene, 2,5-pyridinediyl, 2,5-pyrimidinediyl, 1,3-dioxane-2,5-diyl, 1,4-cyclohexanediyl, 1,4- or 2,6-naphthylene; Y2 = (un)substituted phenylene, 2,5-pyridinediyl, 2,5-pyrimidinediyl, 2,5-thiophenediyl, 2,5-furandiyl, 1,4- or 2,6-naphthylene; Z, Z1 = (CH2)t, O, CO, CO2, O2C, NR, CONR, NRCO, (CH2)uO O(CH2)u, (CH2)uNR, NR(CH2)u; n, p = 0, 1; r, s = 1-20; r + s ≤ 24; t = 1-4; u = 1-3]. They are useful in the preparation of orientation layers for liquid crystals and in optical elements. Thus, (E)-3,4-dimethoxycinnamic acid reacted with Cl(CH2)6OH to give the 6-hydroxyhexyl ester, which was esterified with methacryloyl chloride. The resulting diester was polymerized with AIBN in THF to give a white powder with λmax 322 nm.

IT 212331-42-5P 212331-46-9P 212331-51-6P
212331-60-7P 212331-65-2P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(photocrosslinkable polymers for optical devices)

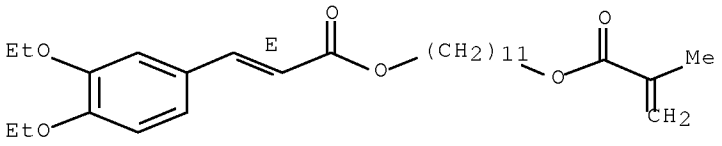
RN 212331-42-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 6-[[(2E)-3-(3,4-dimethoxyphenyl)-1-oxo-2-propen-1-yl]oxy]hexyl ester (CA INDEX NAME)

Double bond geometry as shown.



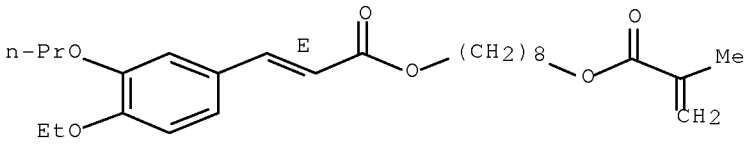
RN 212331-46-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 11-[[(2E)-3-(3,4-diethoxyphenyl)-1-oxo-2-propen-1-yl]oxy]undecyl ester (CA INDEX NAME)

Double bond geometry as shown.



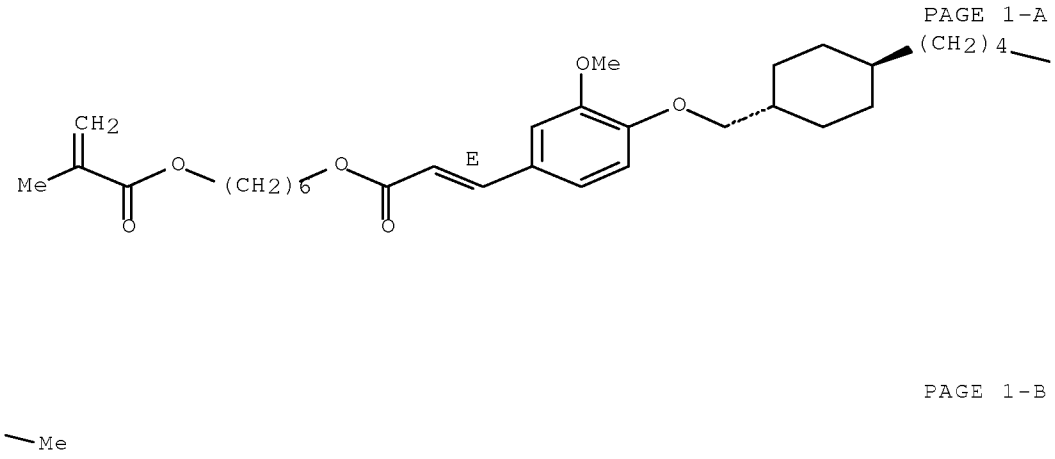
RN 212331-51-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 8-[[(2E)-3-(4-ethoxy-3-propoxyphenyl)-1-oxo-2-propen-1-yl]oxy]octyl ester (CA INDEX NAME)

Double bond geometry as shown.



RN 212331-60-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 6-[[(2E)-3-[3-methoxy-4-[(trans-4-pentylcyclohexyl)methoxy]phenyl]-1-oxo-2-propen-1-yl]oxy]hexyl ester (CA INDEX NAME)

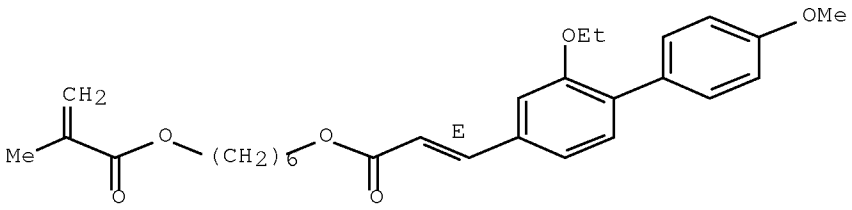
Relative stereochemistry.
Double bond geometry as shown.



PAGE 1-B

RN 212331-65-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 6-[[(2E)-3-(2-ethoxy-4'-methoxy[1,1'-biphenyl]-4-yl)-1-oxo-2-propen-1-yl]oxy]hexyl ester (CA INDEX NAME)

Double bond geometry as shown.



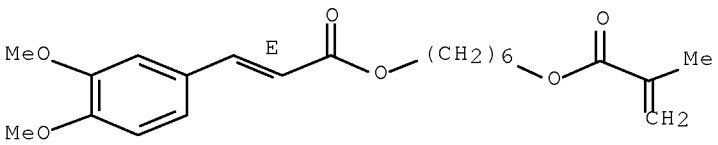
IT 212331-43-6P 212331-45-8P 212331-47-0P
212331-52-7P 212331-61-8P 212331-66-3P
212331-73-2P 212331-75-4P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photocrosslinkable polymers for optical devices)

RN 212331-43-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 6-[[(2E)-3-(3,4-dimethoxyphenyl)-1-oxo-2-propenyl]oxy]hexyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 212331-42-5
CMF C21 H28 O6

Double bond geometry as shown.

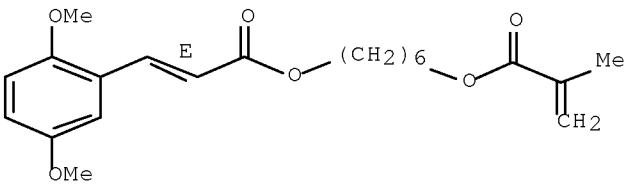


RN 212331-45-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 6-[[(2E)-3-(2,5-dimethoxyphenyl)-1-oxo-2-propenyl]oxy]hexyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 212331-44-7
CMF C21 H28 O6

Double bond geometry as shown.

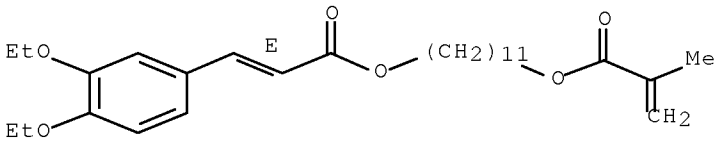


RN 212331-47-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 11-[[(2E)-3-(3,4-diethoxyphenyl)-1-oxo-2-propenyl]oxy]undecyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 212331-46-9
CMF C28 H42 O6

Double bond geometry as shown.

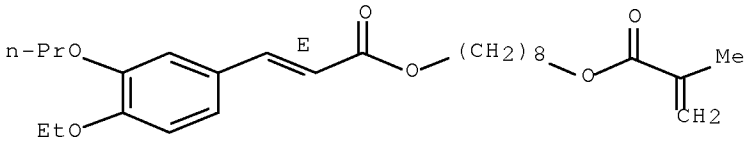


RN 212331-52-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 8-[[(2E)-3-(4-ethoxy-3-propoxyphenyl)-1-oxo-2-propenyl]oxy]octyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 212331-51-6
CMF C26 H38 O6

Double bond geometry as shown.

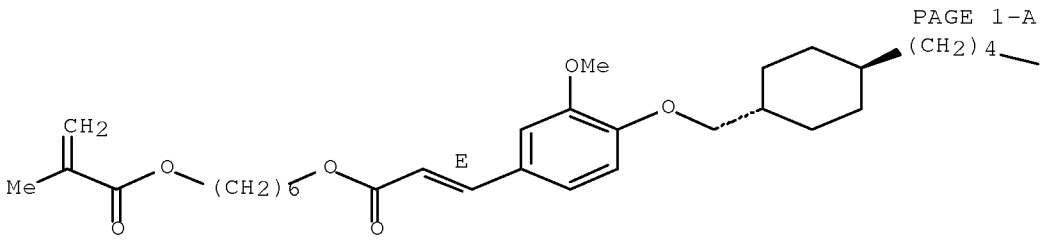


RN 212331-61-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 6-[[(2E)-3-[3-methoxy-4-[(trans-4-pentylcyclohexyl)methoxy]phenyl]-1-oxo-2-propenyl]oxy]hexyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 212331-60-7
CMF C32 H48 O6

Relative stereochemistry.
Double bond geometry as shown.



PAGE 1-B

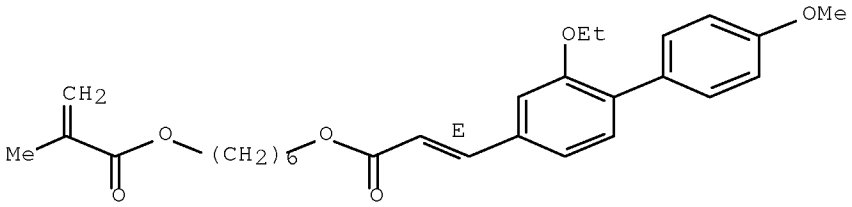
—Me

RN 212331-66-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 6-[[(2E)-3-(2-ethoxy-4'-methoxy[1,1'-biphenyl]-4-yl)-1-oxo-2-propenyl]oxy]hexyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 212331-65-2
CMF C28 H34 O6

Double bond geometry as shown.

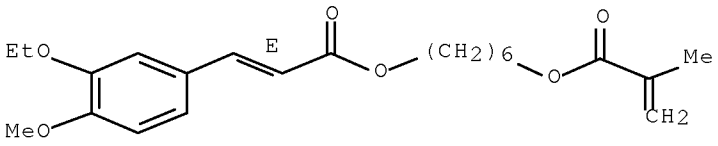


RN 212331-73-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 6-[[(2E)-3-(3-ethoxy-4-methoxyphenyl)-1-oxo-2-propenyl]oxy]hexyl ester, polymer with 2-ethylhexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

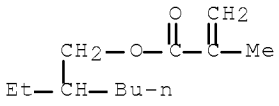
CRN 212331-72-1
CMF C22 H30 O6

Double bond geometry as shown.



CM 2

CRN 688-84-6
CMF C12 H22 O2

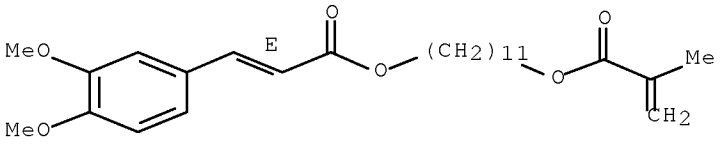


RN 212331-75-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 11-[[(2E)-3-(3,4-dimethoxyphenyl)-1-oxo-2-propenyl]oxy]undecyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 212331-74-3
CMF C26 H38 O6

Double bond geometry as shown.



IC ICM C08F246-00
ICS C09K019-38
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 74, 76
ST photocrosslinkable acrylic polymer; liq crystal orientation layer
IT Optical materials
(photocrosslinkable polymers as)
IT 4049-39-2P, 4-Benzyloxy-3-hydroxybenzaldehyde 22329-76-6P 110943-74-3P 211557-39-0P 212331-42-5P 212331-46-9P 212331-48-1P 212331-49-2P 212331-50-5P 212331-51-6P 212331-53-8P 212331-54-9P 212331-55-0P 212331-56-1P 212331-57-2P 212331-58-3P 212331-59-4P 212331-60-7P 212331-62-9P 212331-63-0P 212331-64-1P 212331-65-2P 212331-67-4P 212331-68-5P 212331-69-6P 212331-70-9P 212331-71-0P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(photocrosslinkable polymers for optical devices)
IT 212331-43-6P 212331-45-8P 212331-47-0P 212331-52-7P 212331-61-8P 212331-66-3P 212331-73-2P 212331-75-4P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photocrosslinkable polymers for optical devices)
IT 100-39-0, Benzyl bromide 106-94-5, Propyl bromide 121-32-4 126-30-7 139-85-5, 3,4-Dihydroxybenzaldehyde 920-46-7, Methacryloyl chloride 1611-56-9, 11-Bromo-1-undecanol 2009-83-8, 6-Chloro-1-hexanol 2029-94-9, 3,4-Diethoxybenzaldehyde 5720-07-0, (4-Methoxyphenyl)boronic acid 71458-08-7, trans-4-Pentylcyclohexanemethanol
RL: RCT (Reactant); RACT (Reactant or reagent)
(photocrosslinkable polymers for optical devices)

L39 ANSWER 14 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:217695 HCAPLUS Full-text
DOCUMENT NUMBER: 128:277121
ORIGINAL REFERENCE NO.: 128:54731a,54734a
TITLE: Composition for antireflection undercoated film for photoresist
INVENTOR(S): Mizutani, Kazuyoshi; Yoshimoto, Hiroshi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10090908	A	19980410	JP 1996-245126	19960917

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PRIORITY APPLN. INFO.: JP 1996-245126 19960917

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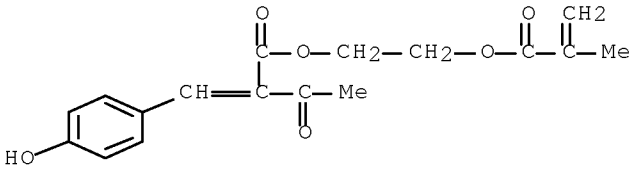
AB The title composition contains a polymer having a repeating unit CH2CR1[XCOC(COZ):CHPYn] [R1 = H, Me, Cl, Br, cyano; X = divalent linking group; P = C6-14 aromatic ring with (n + 1)-valence(s), 5- to 14-membered hetero-aromatic ring; Y = electron-donating group; Z = monovalent organic group; n = 0-3] and a melamine compound, a guanamine compound, a glycoluryl compound, or a urea compound which is substituted with methylol, alkoxymethyl, and/or acyloxymethyl. A method of forming a resist pattern is also claimed, in which the composition applied on a substrate is baked to cure to form a film and a resist layer is patternwise formed thereon. The film shows high antireflecting effect, higher dry etching rate compared to resists, and no intermixing with resist layer.

IT 205586-05-6P 205586-06-7P 205586-08-9P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(film; antireflection undercoated film containing additive for photoresist)

RN 205586-05-6 HCAPLUS
CN Butanoic acid, 2-[(4-hydroxyphenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

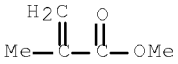
CM 1

CRN 205505-90-4
CMF C17 H18 O6



CM 2

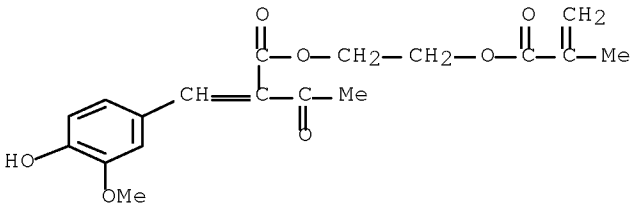
CRN 80-62-6
CMF C5 H8 O2



RN 205586-06-7 HCAPLUS
CN Butanoic acid, 2-[(4-hydroxy-3-methoxyphenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-propenoate (9CI) (CA INDEX NAME)

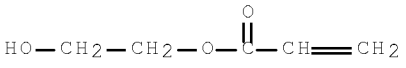
CM 1

CRN 205505-91-5
CMF C18 H20 O7



CM 2

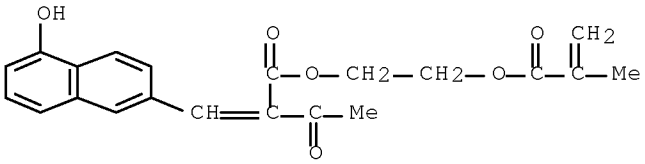
CRN 818-61-1
CMF C5 H8 O3



RN 205586-08-9 HCAPLUS
CN Butanoic acid, 2-[(5-hydroxy-2-naphthalenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with ethyl 2-methyl-2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

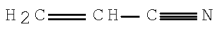
CM 1

CRN 205586-04-5
CMF C21 H20 O6



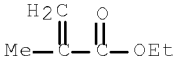
CM 2

CRN 107-13-1
CMF C3 H3 N



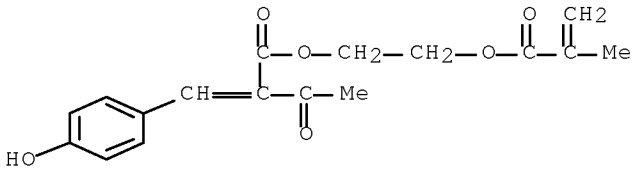
CM 3

CRN 97-63-2
CMF C6 H10 O2



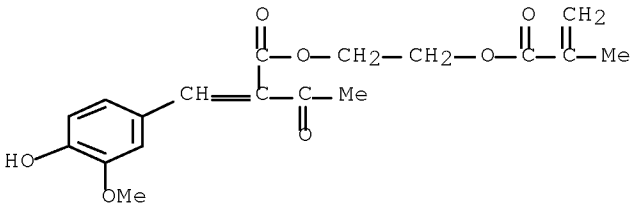
IT 205505-90-4P 205505-91-5P 205586-04-5P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomer; patterning of photoresist on antireflection undercoated film prepared from)

RN 205505-90-4 HCAPLUS
CN Butanoic acid, 2-[(4-hydroxyphenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl ester (CA INDEX NAME)

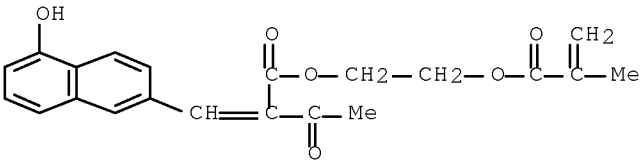


RN 205505-91-5 HCAPLUS
CN Butanoic acid, 2-[(4-hydroxy-3-methoxyphenyl)methylene]-3-oxo-,

2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl ester (CA INDEX NAME)



RN 205586-04-5 HCAPLUS
CN Butanoic acid, 2-[(5-hydroxy-2-naphthalenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl ester (CA INDEX NAME)



IC ICM G03F007-11
ICS C09D005-00; C09D133-00; G03F007-004; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 205586-05-6P 205586-06-7P 205586-07-8P
205586-08-9P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(film; antireflection undercoated film containing additive for photoresist)
IT 205505-90-4P 205505-91-5P 205506-00-9P
205586-04-5P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomer; patterning of photoresist on antireflection undercoated film prepared from)

L39 ANSWER 15 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:217694 HCAPLUS Full-text
DOCUMENT NUMBER: 128:277120
ORIGINAL REFERENCE NO.: 128:54731a,54734a
TITLE: Composition for antireflection undercoated film and resist pattern formation using same
INVENTOR(S): Mizutani, Kazuyoshi; Yoshimoto, Hiroshi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10090907	A	19980410	JP 1996-243625	199609 13 <--
JP 3676510	B2	20050727		
PRIORITY APPLN. INFO.:			JP 1996-243625	199609 13 <--

AB The title composition contains a polymer having a repeating unit CH2CR1[XCOC(COZ):CHPYn] [R1 = H, Me, Cl, Br, cyano; X = divalent linking group; P = C6-14 aromatic ring with (n + 1)-valence(s), 5- to 14-membered hetero-aromatic ring; Y = electron-donating group; Z = monovalent organic group; n = 0-3]. A method of forming a resist pattern is also claimed, in which the composition applied on a substrate is baked to cure to form a film and a resist layer is patternwise formed thereon. The film shows high antireflecting effect, higher dry etching rate compared to resists, and no intermixing with resist layer.

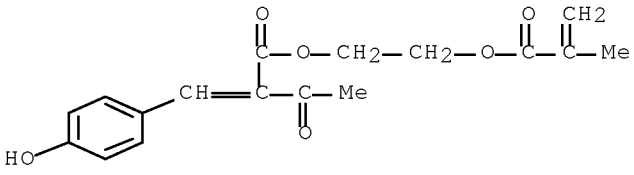
IT 205505-95-9P 205505-97-1P 205505-98-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(film; antireflection undercoated film for photoresist)

RN 205505-95-9 HCAPLUS

CN Butanoic acid, 2-[(4-hydroxyphenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

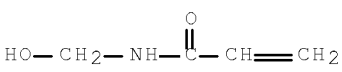
CM 1

CRN 205505-90-4
CMF C17 H18 O6



CM 2

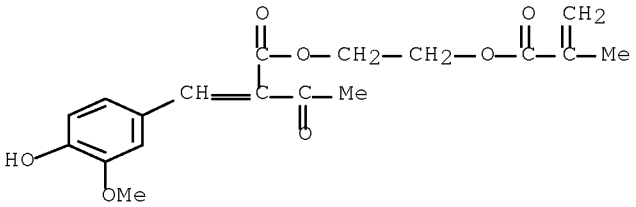
CRN 924-42-5
CMF C4 H7 N O2



RN 205505-97-1 HCAPLUS
CN Butanoic acid, 2-[(4-hydroxy-3-methoxyphenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

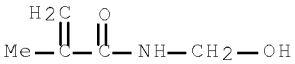
CM 1

CRN 205505-91-5
CMF C18 H20 O7



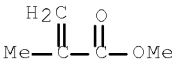
CM 2

CRN 923-02-4
CMF C5 H9 N O2



CM 3

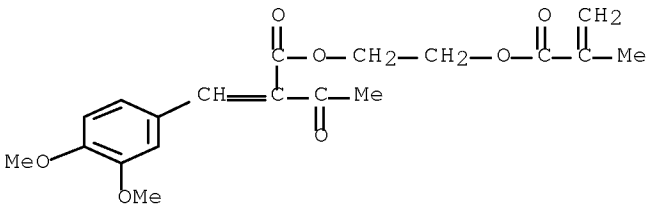
CRN 80-62-6
CMF C5 H8 O2



RN 205505-98-2 HCAPLUS
CN Butanoic acid, 2-[(3,4-dimethoxyphenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

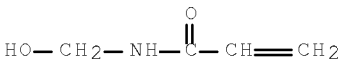
CM 1

CRN 205505-92-6
CMF C19 H22 O7



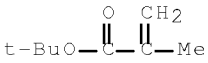
CM 2

CRN 924-42-5
CMF C4 H7 N O2

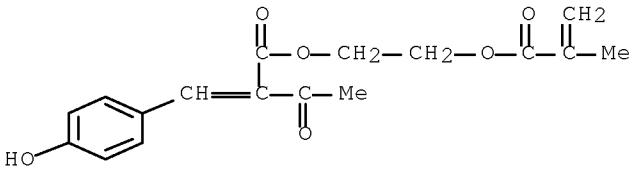


CM 3

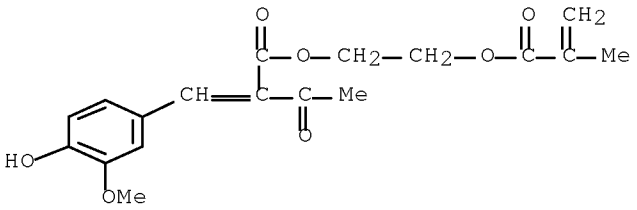
CRN 585-07-9
CMF C8 H14 O2



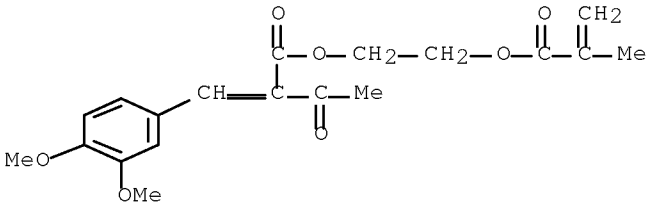
IT 205505-90-4P 205505-91-5P 205505-92-6P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomer; patterning of photoresist on antireflection undercoated film prepared from)
RN 205505-90-4 HCAPLUS
CN Butanoic acid, 2-[(4-hydroxyphenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl ester (CA INDEX NAME)



RN 205505-91-5 HCAPLUS
CN Butanoic acid, 2-[(4-hydroxy-3-methoxyphenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl ester (CA INDEX NAME)



RN 205505-92-6 HCAPLUS
CN Butanoic acid, 2-[(3,4-dimethoxyphenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl ester (CA INDEX NAME)



IC ICM G03F007-11
ICS C09D005-00; C09D133-00; G03F007-004; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 205505-95-9P 205505-97-1P 205505-98-2P
205505-99-3P 205506-01-0P 205506-03-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(film; antireflection undercoated film for photoresist)
IT 205505-90-4P 205505-91-5P 205505-92-6P
205505-93-7P 205506-00-9P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomer; patterning of photoresist on antireflection undercoated film prepared from)

L39 ANSWER 16 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:561867 HCAPLUS Full-text
DOCUMENT NUMBER: 127:221038
ORIGINAL REFERENCE NO.: 127:43089a,43092a
TITLE: Photoresponsive functionalized vinyl cinnamate polymers: synthesis and characterization
AUTHOR(S): Ali, A. Hyder; Srinivasan, K. S. V.
CORPORATE SOURCE: Polymer Division, Central Leather Research Institute, Madras, 600 020, India
SOURCE: Polymer International (1997), 43(4), 310-316
CODEN: PLYIEI; ISSN: 0959-8103
PUBLISHER: Wiley
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of functionalized vinyl cinnamate monomers was synthesized by the reaction of hydroxyethyl methacrylate and various substituted cinnamoyl

chlorides. Electron donating and accepting functional groups such as -OCH3, -Cl and -NO2 were introduced at the para position of cinnamoyl chloride. Homopolymn. of the synthesized monomers were carried out in DMF using AIBN as a free radical initiator at 80°C for 12 h. The structures of the synthesized monomers and their polymers were characterized using FTIR, 1H and 13C NMR spectroscopic techniques. Solid-state crosslinking of the above photosensitive polymers was studied by UV and FTIR spectroscopic techniques. The effects of various functional groups and the addition of sensitizer (benzophenone) on the photocrosslinking nature of the polymers were studied. The mechanism of photocrosslinking is a (2 + 2)π electron cycloaddn. and not cis-trans isomerization in the functionalized poly(vinyl cinnamates).

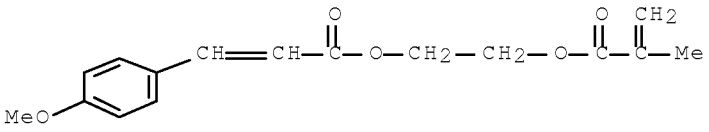
IT 133750-18-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and characterization and photocrosslinking of)

RN 133750-18-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

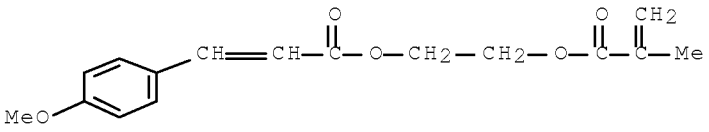
CRN 107162-92-5
CMF C16 H18 O5



IT 107162-92-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and polymerization of)

RN 107162-92-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propen-1-yl]oxy]ethyl ester (CA INDEX NAME)



CC 35-4 (Chemistry of Synthetic High Polymers)

ST photoresponsive functionalized vinyl cinnamate polymer; photocrosslinking vinyl cinnamate polymer; hydroxyethyl methacrylate esterification cinnamoyl chloride

IT Crosslinking
(photochem.; of photoresponsive functionalized vinyl cinnamate polymers)

IT Light-sensitive materials
(preparation and characterization of photoresponsive functionalized vinyl cinnamate polymers)

IT 38413-24-0P 133750-18-2P 194991-31-6P 194991-32-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and characterization and photocrosslinking of)

IT 41261-99-8P 107162-92-5P 182362-23-8P 194991-30-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and polymerization of)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 17 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:12946 HCAPLUS Full-text
DOCUMENT NUMBER: 126:90084
ORIGINAL REFERENCE NO.: 126:17397a,17400a
TITLE: Efficient second-harmonic generation in novel Cerenkov type nonlinear-optical polymer waveguides
AUTHOR(S): Schmitt, K.; Benecke, C.; Schadt, M.
CORPORATE SOURCE: Rolic Ltd., Basel, 4002, Switz.
SOURCE: Journal of Applied Physics (1997), 81(1), 11-17
CODEN: JAPIAU; ISSN: 0021-8979
PUBLISHER: American Institute of Physics
DOCUMENT TYPE: Journal
LANGUAGE: English

AB New cinnamic acid type nonlinear-optical (NLO) photopolymers and their use in frequency doubling Cerenkov waveguides are reported. Cerenkov configurations are shown to be particularly appropriate for efficient second-harmonic generation in NLO polymers. Anal. of Cerenkov waveguides in three-layer configurations allows optimization of their performance with respect to polymer layer thickness and substrate parameters. The NLO efficiencies predicted from the model and from independently determined NLO material parameters are qual. in agreement with the exptl. observed large Cerenkov NLO efficiency of 0.2% W-1 cm-1. Improved device performance results from novel four-layer waveguide configurations were presented.

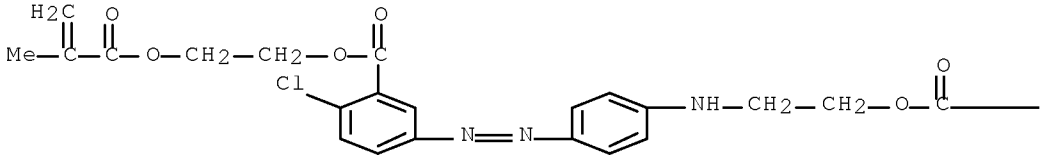
IT 185518-58-5
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(efficient second-harmonic generation in novel Cerenkov type nonlinear-optical methacrylate polymer waveguides)

RN 185518-58-5 HCAPLUS
CN Benzoic acid, 2-chloro-5-[[4-[[2-[[3-(4-chlorophenyl)-1-oxo-2-propenyl]oxy]ethyl]amino]phenyl]azo]-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

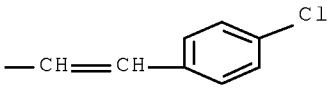
CM 1

CRN 185518-57-4
CMF C30 H27 Cl2 N3 O6

PAGE 1-A

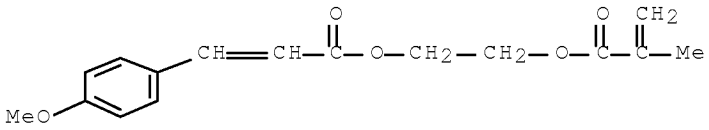


PAGE 1-B



CM 2

CRN 107162-92-5
CMF C16 H18 O5



CC 37-5 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 73
ST cinnamic acid nonlinear optical polymer waveguide;
methacrylate polymer nonlinear optical waveguide
IT Second-harmonic generation
(efficient second-harmonic generation in novel Cerenkov type nonlinear-optical methacrylate polymer waveguides)
IT Optical waveguides
(nonlinear; efficient second-harmonic generation in novel Cerenkov type nonlinear-optical methacrylate polymer waveguides)
IT 185518-58-5 185518-60-9
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(efficient second-harmonic generation in novel Cerenkov type nonlinear-optical methacrylate polymer waveguides)
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 18 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:585715 HCAPLUS Full-text
DOCUMENT NUMBER: 125:249290
ORIGINAL REFERENCE NO.: 125:46605a,46608a
TITLE: In situ determination of glass transition temperatures in thin polymer films
AUTHOR(S): Benecke, C.; Schmitt, K.; Schadt, M.
CORPORATE SOURCE: ROLIC ltd., Basel, CH-4002, Switz.
SOURCE: Liquid Crystals (1996), 21(4), 575-580
CODEN: LICRE6; ISSN: 0267-8292
PUBLISHER: Taylor & Francis
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A method for determining the glass transition temperature Tg of waveguides azo-containing nonlinear optical polymethacrylate (NLO) films is presented.

This enables for the first time monitoring of the Tg of NLO-films on device substrates in situ. Tg is shown to follow from the temperature dependencies of the refractive index or the thickness of thin films.

IT 182362-20-5
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(in situ determination of glass transition temps. in azo-containing waveguide
nonlinear optical polymethacrylate films)

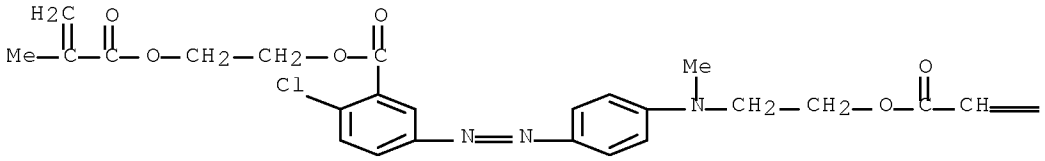
RN 182362-20-5 HCAPLUS

CN Benzoic acid, 2-chloro-5-[[4-[[2-[[3-(4-chlorophenyl)-1-oxo-2-propenyl]oxy]ethyl]methylamino]phenyl]azo]-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

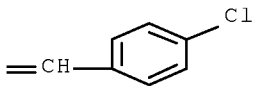
CM 1

CRN 182362-19-2
CMF C31 H29 Cl2 N3 O6

PAGE 1-A

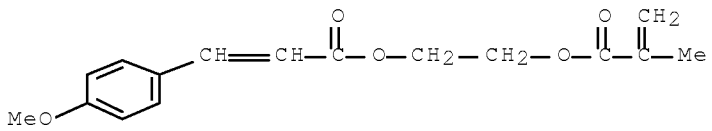


PAGE 1-B



CM 2

CRN 107162-92-5
CMF C16 H18 O5



CC 37-5 (Plastics Manufacture and Processing)
Section cross-reference(s): 73

IT 182362-20-5 182362-24-9
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(in situ determination of glass transition temps. in azo-containing

waveguide
nonlinear optical polymethacrylate films)

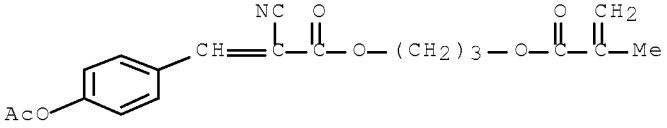
L39 ANSWER 19 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:818871 HCAPLUS Full-text
DOCUMENT NUMBER: 123:213258
ORIGINAL REFERENCE NO.: 123:37725a,37728a
TITLE: Photoresist composition and image formation
INVENTOR(S): Wakata, Juichi; Sato, Morimasa; Iwakura, Ken; Fukushige, Juichi
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07191462	A	19950728	JP 1994-6385	19940125
JP 3331035	B2	20021007		
US 5663212	A	19970902	US 1994-191927	19940204
PRIORITY APPLN. INFO.:			JP 1993-18947 A	19930205
			JP 1993-220151 A	19930903

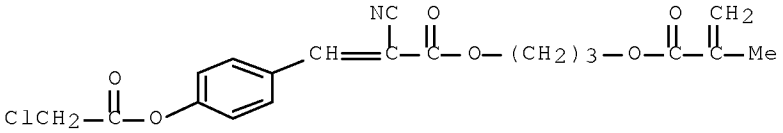
AB The title photoresist composition comprises (1) a photopolymn. initiator, (2) an ethylenic monomer, (3) an alkaline aqueous solution-soluble but water-insol. polymer bonder, and (4) a compound without absorption in visible region and not absorbing the light of wavelength 280-450 nm but absorbing it after alkaline development and(or) heating. Image formation using the photoresist composition is also claimed.

IT 168203-83-6P 168203-84-7P 168203-85-8P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepared for photoresist composition)

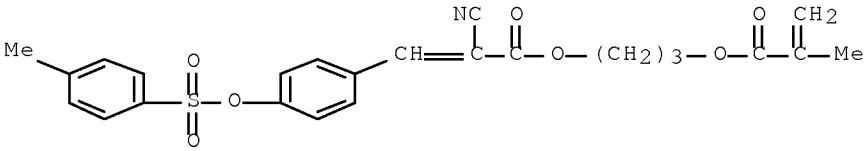
RN 168203-83-6 HCAPLUS
CN 2-Propenoic acid, 3-[4-(acetyloxy)phenyl]-2-cyano-, 3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)



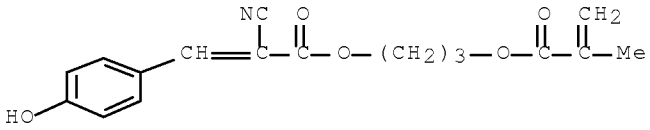
RN 168203-84-7 HCAPLUS
CN 2-Propenoic acid, 3-[4-[(2-chloroacetyl)oxy]phenyl]-2-cyano-, 3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)



RN 168203-85-8 HCAPLUS
CN 2-Propenoic acid, 2-cyano-3-[4-[[(4-methylphenyl)sulfonyl]oxy]phenyl]-, 3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)



IT 168203-86-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of specified compound for photoresist composition)
RN 168203-86-9 HCAPLUS
CN 2-Propenoic acid, 2-cyano-3-(4-hydroxyphenyl)-, 3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)



IC ICM G03F007-028
ICS G02B005-20; G03F003-10; G03F007-00; G03F007-004; G03F007-027; G03F007-033; G03F007-038; G03F007-30; G03F007-40; H01L021-027; H05K003-00
ICA G02F001-1335
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 103721-24-0P 168203-70-1P 168203-78-9P 168203-79-0P 168203-80-3P 168203-81-4P 168203-82-5P 168203-83-6P 168203-84-7P 168203-85-8P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepared for photoresist composition)
IT 75-36-5, Acetyl chloride 76-02-8, Trichloroacetyl chloride 79-04-9, Chloroacetyl chloride 79-22-1, Methyl chloroformate 98-59-9, p-Toluene sulfonyl chloride 2440-22-4, Tinuvin P 70321-86-7, Tinuvin 234 103597-45-1, ADK Stab LA-31 104810-48-2,

Tinuvin 1130 168203-86-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of specified compound for photoresist composition)

L39 ANSWER 20 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:487811 HCAPLUS Full-text
DOCUMENT NUMBER: 122:215943
ORIGINAL REFERENCE NO.: 122:39465a,39468a
TITLE: Orientation layers for liquid crystals
INVENTOR(S): Rolf, Peter; Kelly, Stephen; Schadt, Martin; Schmitt, Klaus; Schuster, Andreas
PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.
SOURCE: Eur. Pat. Appl., 29 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 611786	A1	19940824	EP 1994-101699	19940204
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EP 611786	B1	19990414		
R: CH, DE, FR, GB, IT, LI, NL				
US 5539074	A	19960723	US 1994-191835	19940204
			<--	
SG 64893	A1	19990817	SG 1996-5598	19940204
			<--	
EP 611981	A1	19940824	EP 1994-101684	19940207
			<--	
EP 611981	B1	19970611		
R: CH, DE, FR, GB, IT, LI, NL				
SG 50569	A1	20010220	SG 1996-5186	19940207
			<--	
SG 94794	A1	20030318	SG 2001-200101880	19940207
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JP 06289374	A	19941018	JP 1994-16662	19940210
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JP 2543666	B2	19961016		
CN 1091458	A	19940831	CN 1994-101586	19940216
			<--	
CN 1096807	A	19941228	CN 1994-101585	

				199402 16 <--
CN 1054439	C	20000712		
JP 06287453	A	19941011	JP 1994-20376	199402 17 <--
JP 3611342	B2	20050119		
US 36625	E	20000321	US 1998-119787	199807 21 <--
HK 1012018	A1	20000428	HK 1998-112064	199811 17 <--
PRIORITY APPLN. INFO.:			CH 1993-488 A	199302 17 <--
			CH 1993-553 A	199302 23 <--
			US 1994-191835 A5	199402 04 <--

AB The title layers, which can be prepared reproducibly without leaving undesirable OH groups, comprise polymers (d.p. 4-100,000) bearing mols. capable of undergoing photochem. isomerization/dimerization and separated from the polymer backbone by spacer units. Reduction of 4'-pentyl-4-biphenylcarbonitrile with iso-Bu2AlH gave 4'-pentyl-4-biphenylcarboxaldehyde which was treated with (EtO)2PCH2CO2SiMe3 and BuLi in THF to give 3-(E)-(4'pentyl-4-biphenylyl)acrylic acid, reaction of which with hydroxyethyl methacrylate gave the (methacryloyloxy)ethyl ester (I). AIBN-initiated polymerization of 1 g I in THF at 60° gave 0.4 g polymer with glass temperature 123° and clear point 160°.

IT 162206-24-8P 162206-30-6P 162206-31-7P
162206-32-8P
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(orientation layers for liquid crystals)

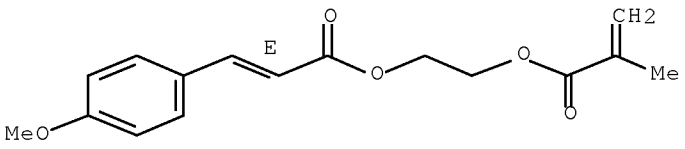
RN 162206-24-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl ester, (E)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 133750-25-1
CMF C16 H18 O5

Double bond geometry as shown.

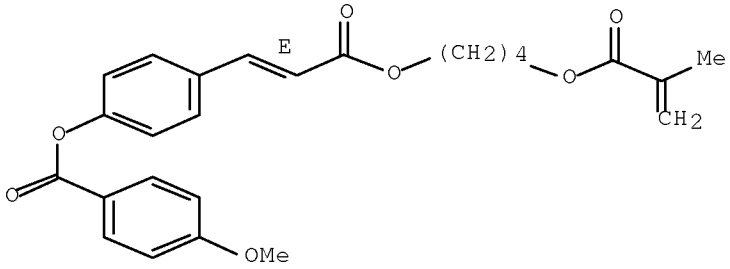


RN 162206-30-6 HCAPLUS
CN Benzoic acid, 4-methoxy-, 4-[3-[4-[(2-methyl-1-oxo-2-propenyl)oxy]butoxy]-3-oxo-1-propenyl]phenyl ester, (E)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 162206-29-3
CMF C25 H26 O7

Double bond geometry as shown.

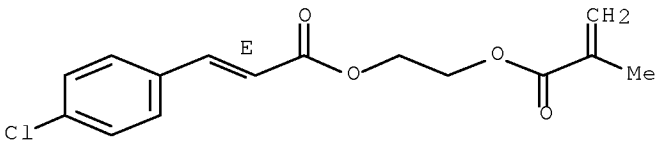


RN 162206-31-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-chlorophenyl)-1-oxo-2-propenyl]oxy]ethyl ester, (E)-, polymer with (E)-2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 156807-06-6
CMF C15 H15 Cl O4

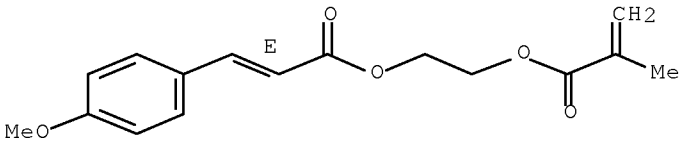
Double bond geometry as shown.



CM 2

CRN 133750-25-1
CMF C16 H18 O5

Double bond geometry as shown.

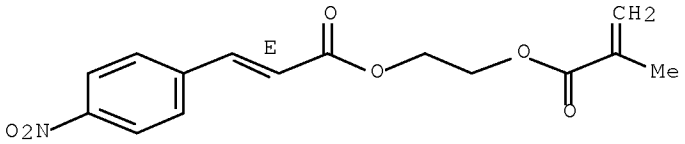


RN 162206-32-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl ester, (E)-, polymer with (E)-2-[[3-(4-nitrophenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 156807-25-9
CMF C15 H15 N O6

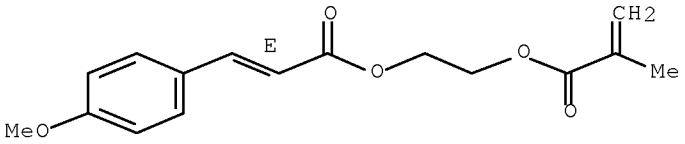
Double bond geometry as shown.



CM 2

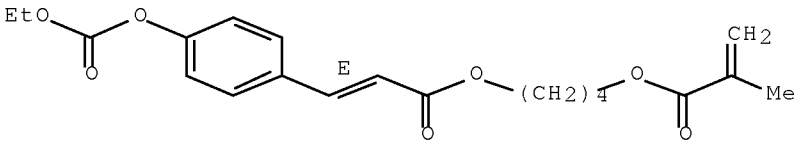
CRN 133750-25-1
CMF C16 H18 O5

Double bond geometry as shown.



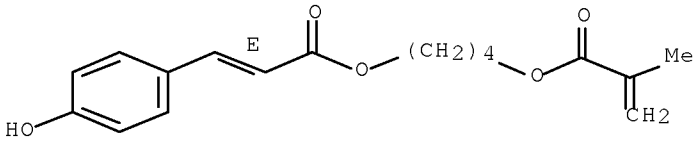
IT 162206-38-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)
RN 162206-38-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 4-[[3-[4-[(ethoxycarbonyl)oxy]phenyl]-1-oxo-2-propenyl]oxy]butyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



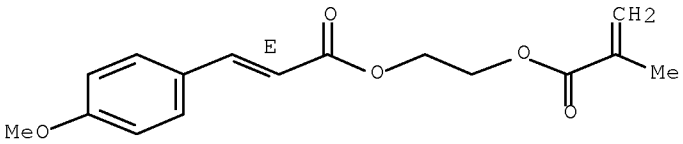
IT 162206-39-5P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with methoxybenzoyl chloride)
RN 162206-39-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 4-[[3-(4-hydroxyphenyl)-1-oxo-2-propenyl]oxy]butyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



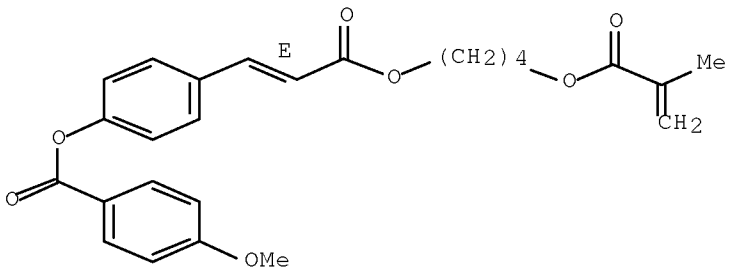
IT 133750-25-1P 162206-29-3P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of)
RN 133750-25-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 162206-29-3 HCAPLUS
CN Benzoic acid, 4-methoxy-, 4-[3-[4-[(2-methyl-1-oxo-2-propenyl)oxy]butoxy]-3-oxo-1-propenyl]phenyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C08G077-38
ICS C08F246-00; G02F001-1337
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 25, 75
ST liq crystal orientation layer; pentylbiphenylylacrylate methacryloyloxyethyl polymer; pentylbiphenylcarbonitrile redn; pentylbiphenylcarboxaldehyde Wittig reaction
IT 49718-23-2DP, Methylsilanediol homopolymer, reaction products with butenyl cinnamate 162206-16-8P 162206-18-0P 162206-20-4P 162206-22-6P 162206-23-7P 162206-24-8P 162206-26-0P 162206-27-1P 162206-28-2P 162206-30-6P 162206-31-7P 162206-32-8P 162206-34-0P 162206-36-2P 162206-41-9DP, reaction products with Me hydrogen siloxanes
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(orientation layers for liquid crystals)
IT 162206-38-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)
IT 162206-39-5P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with methoxybenzoyl chloride)
IT 133750-25-1P 156807-06-6P 161065-23-2P 162206-15-7P 162206-29-3P 162206-33-9P 162206-35-1P 162206-41-9P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of)

L39 ANSWER 21 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:606284 HCAPLUS Full-text
DOCUMENT NUMBER: 121:206284
ORIGINAL REFERENCE NO.: 121:37579a,37582a
TITLE: Polymeric UV absorbers
INVENTOR(S): Okuda, Naohiro; Uchama, Jujiro
PATENT ASSIGNEE(S): Osaka Juki Kagaku Kogyo Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 06073369 A 19940315 JP 1992-227300
199208
26
<--
JP 2958193 B2 19991006
PRIORITY APPLN. INFO.: JP 1992-227300
199208
26
<--

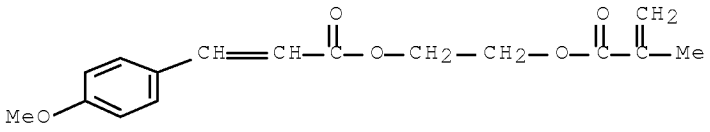
AB The title absorbers useful in cosmetics are formed by copolymn. of hydrophilic to water-soluble monomers and UV-absorbing group-containing monomers. 2-Methoxyethyl acrylate 45, 2-hydroxyethyl acrylate 50, and 2-methacryloyloxyethyl p-(dimethylamino)benzoate 5 parts were polymerized in the presence of AIBN in EtOH.

IT 158037-80-0P 158037-81-1P 158037-82-2P
158037-83-3P 158037-84-4P 158037-85-5P
158037-86-6P
RL: PREP (Preparation)
(manufacture of UV-absorbing, for cosmetics)

RN 158037-80-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

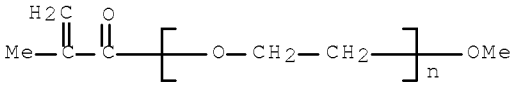
CM 1

CRN 107162-92-5
CMF C16 H18 O5



CM 2

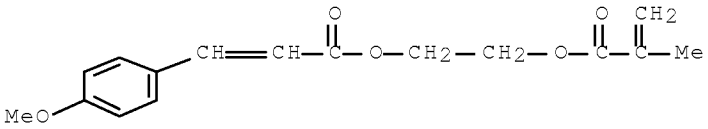
CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



RN 158037-81-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

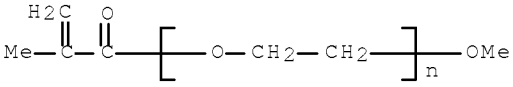
CM 1

CRN 107162-92-5
CMF C16 H18 O5



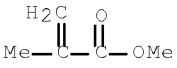
CM 2

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



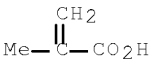
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

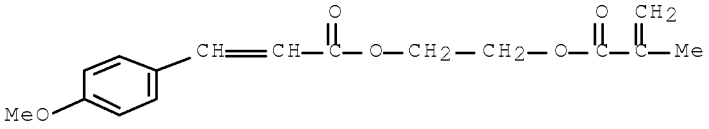
CRN 79-41-4
CMF C4 H6 O2



RN 158037-82-2 HCAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

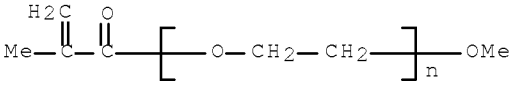
CM 1

CRN 107162-92-5
CMF C16 H18 O5



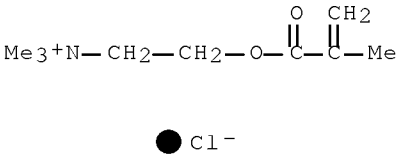
CM 2

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



CM 3

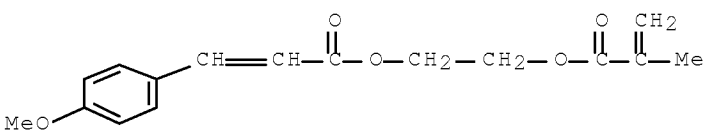
CRN 5039-78-1
CMF C9 H18 N O2 . Cl



RN 158037-83-3 HCAPLUS
CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

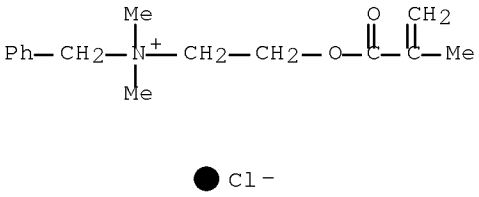
CM 1

CRN 107162-92-5
CMF C16 H18 O5



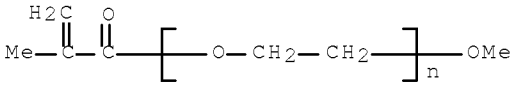
CM 2

CRN 46917-07-1
CMF C15 H22 N O2 . Cl



CM 3

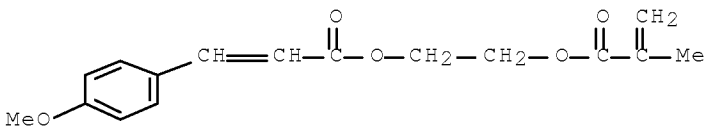
CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



RN 158037-84-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), octadecyl 2-methyl-2-propenoate and tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

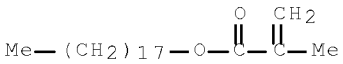
CM 1

CRN 107162-92-5
CMF C16 H18 O5



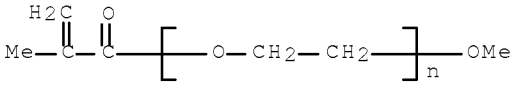
CM 2

CRN 32360-05-7
CMF C22 H42 O2



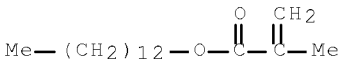
CM 3

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



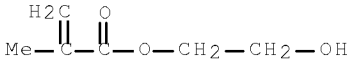
CM 4

CRN 2495-25-2
CMF C17 H32 O2



CM 5

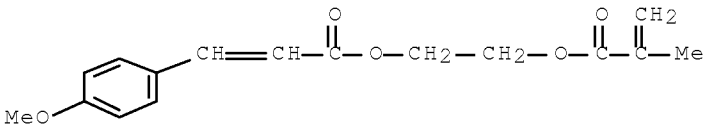
CRN 868-77-9
CMF C6 H10 O3



RN 158037-85-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(2-methoxyethoxy)ethyl ester, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), octadecyl 2-methyl-2-propenoate and tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

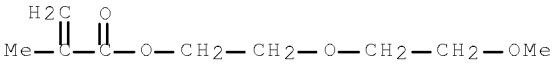
CM 1

CRN 107162-92-5
CMF C16 H18 O5



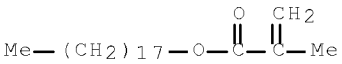
CM 2

CRN 45103-58-0
CMF C9 H16 O4



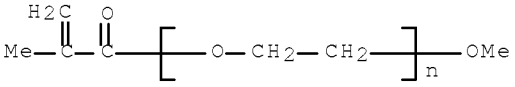
CM 3

CRN 32360-05-7
CMF C22 H42 O2



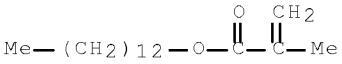
CM 4

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



CM 5

CRN 2495-25-2
CMF C17 H32 O2

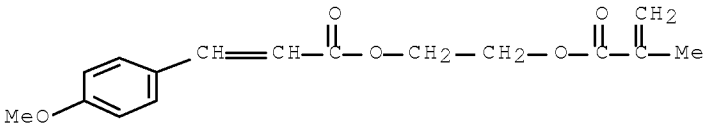


RN 158037-86-6 HCAPLUS
CN Benzoic acid, 4-(dimethylamino)-, 2-[(2-methyl-1-oxo-2-

propenyl)oxy]ethyl ester, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

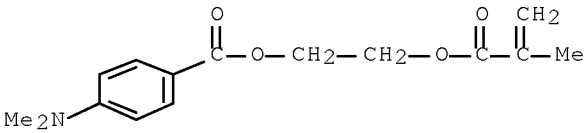
CM 1

CRN 107162-92-5
CMF C16 H18 O5



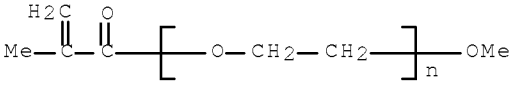
CM 2

CRN 79984-80-8
CMF C15 H19 N O4



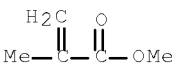
CM 3

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



CM 4

CRN 80-62-6
CMF C5 H8 O2



IC ICM C09K003-00
ICA A61K007-00; A61K007-42
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 62
IT Sunscreens
(polymeric UV absorbers for)
IT 79984-80-8P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(manufacture and polymerization of)
IT 158037-79-7P 158037-80-0P 158037-81-1P
158037-82-2P 158037-83-3P 158037-84-4P
158037-85-5P 158037-86-6P 158037-87-7P
158037-88-8P
RL: PREP (Preparation)
(manufacture of UV-absorbing, for cosmetics)

L39 ANSWER 22 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:521364 HCAPLUS Full-text
DOCUMENT NUMBER: 121:121364
ORIGINAL REFERENCE NO.: 121:21681a,21684a
TITLE: Optical nonlinear polymers
INVENTOR(S): Herr, Rolf Peter; Schadt, Martin; Schmitt, Klaus
PATENT ASSIGNEE(S): F. Hoffmann-la Roche AG, Switz.
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9400797	A1	19940106	WO 1993-EP1476	199306 11 <--
W: JP, KR, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 600064	A1	19940608	EP 1993-912946	199306 11 <--
R: CH, DE, FR, GB, IT, LI, NL				
JP 06509889	T	19941102	JP 1993-501987	199306 11 <--
PRIORITY APPLN. INFO.:			CH 1992-1946 A	199206 19 <--
			WO 1993-EP1476 W	199306 11 <--

GI For diagram(s), see printed CA Issue.

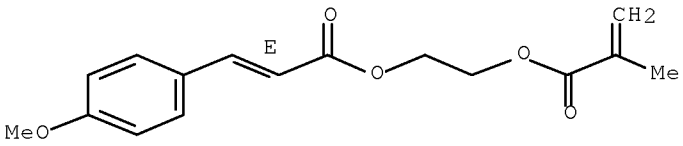
AB The title polymers are described by the general formula I (Ma, Mb, Mc = monomer units for homo- or copolymers; x, y, z = mole fraction of the copolymers, whereby in each case $0 < x \leq 1$; $0 \leq y < 1$ and $0 \leq z < 1$; Sa, Sb, Sc represent spacer units; Fa denotes a nonlinear optically-active chromophore having an adsorption in the region 300-700 nm; Za, Zb represent mol. units which are photochem. dimerizable; n is of the magnitude of 4-1,000,000; and s = 1, 2 or 3). The polymers is accordance with the invention are characterized in that the Fa chromophores are bonded via a spacer (Sa) to the monomer unit (Ma) and themselves carry, likewise via a spacer, one or more photochem. dimerizable groups (Za) which serve for the photochem. cross-linkage of the polymer. A method for the production of the polymers entails first reacting the monomer units with the spacer units, optionally the chromophore units, and the dimerizable units, and polymerizing

IT 133750-25-1P
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and polymerization of, in crosslinkable nonlinear optical polymer preparation)

RN 133750-25-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



IT 156807-05-5P 156807-09-9P 156807-11-3P
156807-12-4P 156807-17-9P 156807-27-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, as crosslinkable nonlinear optical material)

RN 156807-05-5 HCAPLUS

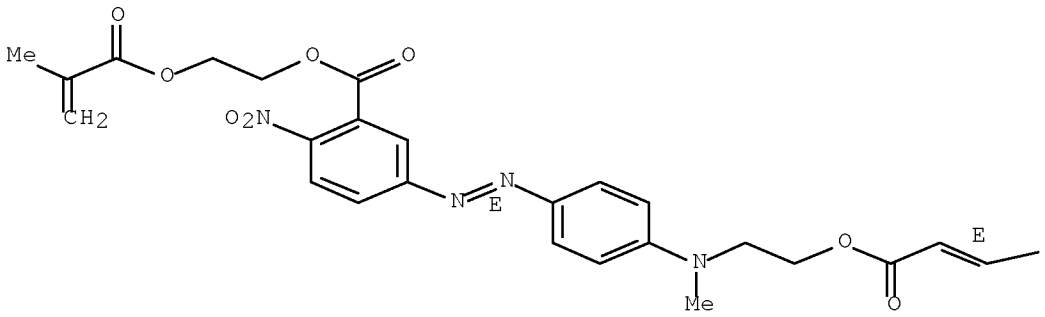
CN Benzoic acid, 5-[[4-[[2-[[3-(4-chlorophenyl)-1-oxo-2-propenyl]oxy]ethyl]methylamino]phenyl]azo]-2-nitro-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, (E,E)-, polymer with (E)-2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

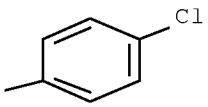
CRN 156806-98-3
CMF C31 H29 Cl N4 O8

Double bond geometry as shown.

PAGE 1-A



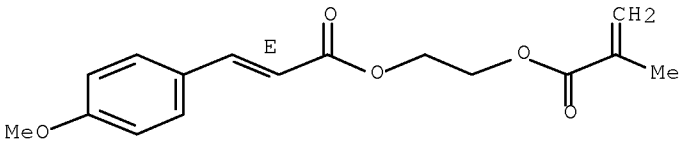
PAGE 1-B



CM 2

CRN 133750-25-1
CMF C16 H18 O5

Double bond geometry as shown.



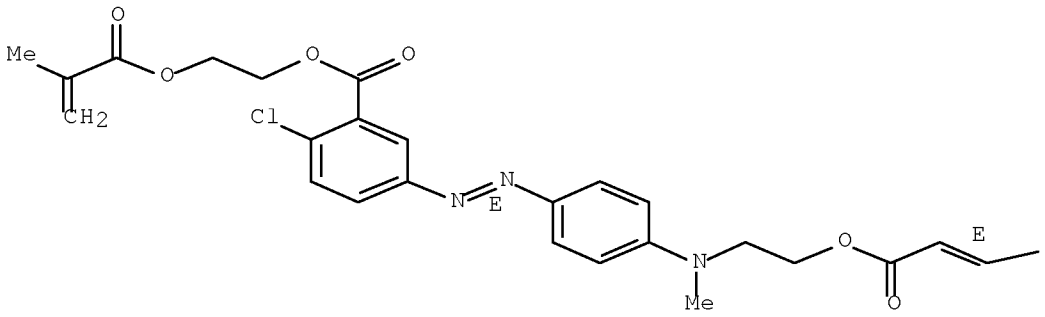
RN 156807-09-9 HCAPLUS
CN Benzoic acid, 2-chloro-5-[[4-[[2-[[3-(4-chlorophenyl)-1-oxo-2-propenyl]oxy]ethyl]methylamino]phenyl]azo]-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, (E,E)-, polymer with (E)-2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

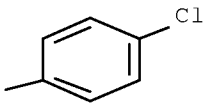
CRN 156807-08-8
CMF C31 H29 Cl2 N3 O6

Double bond geometry as shown.

PAGE 1-A



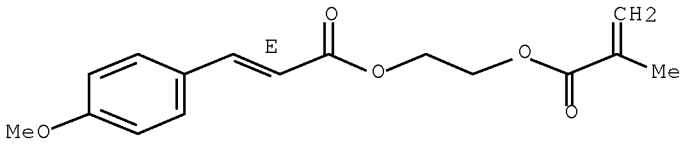
PAGE 1-B



CM 2

CRN 133750-25-1
CMF C16 H18 O5

Double bond geometry as shown.



RN 156807-11-3 HCAPLUS
CN Benzoic acid, 2-bromo-5-[[4-[[2-[[3-(4-chlorophenyl)-1-oxo-2-propenyl]oxy]ethyl]methylamino]phenyl]azo]-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, (E,E)-, polymer with (E)-2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

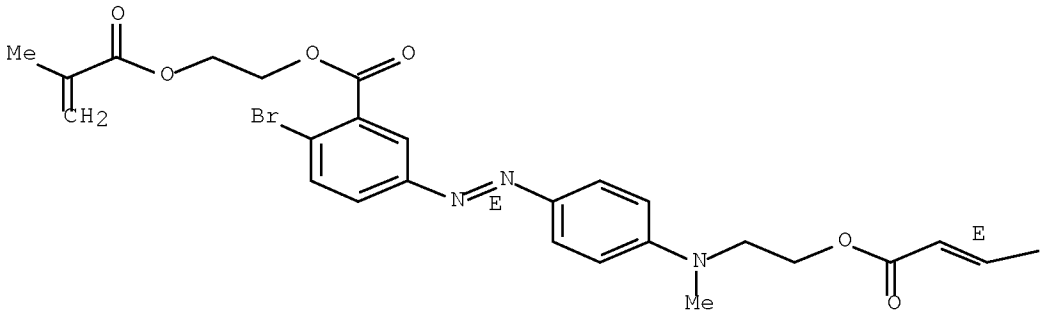
CM 1

CRN 156807-10-2

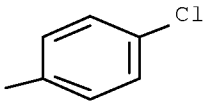
CMF C31 H29 Br Cl N3 O6

Double bond geometry as shown.

PAGE 1-A



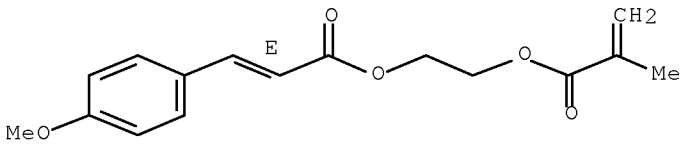
PAGE 1-B



CM 2

CRN 133750-25-1
CMF C16 H18 O5

Double bond geometry as shown.

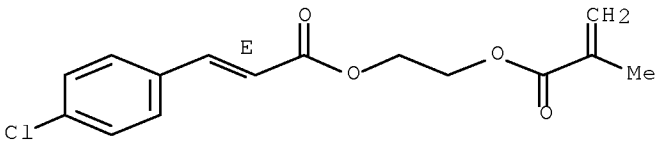


RN 156807-12-4 HCAPLUS
CN Benzoic acid, 5-[[4-[[2-[[3-(4-chlorophenyl)-1-oxo-2-propenyl]oxy]ethyl]methylamino]phenyl]azo]-2-nitro-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, (E,E)-, polymer with (E)-2-[[3-(4-chlorophenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate and (E)-2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 156807-06-6
CMF C15 H15 Cl O4

Double bond geometry as shown.

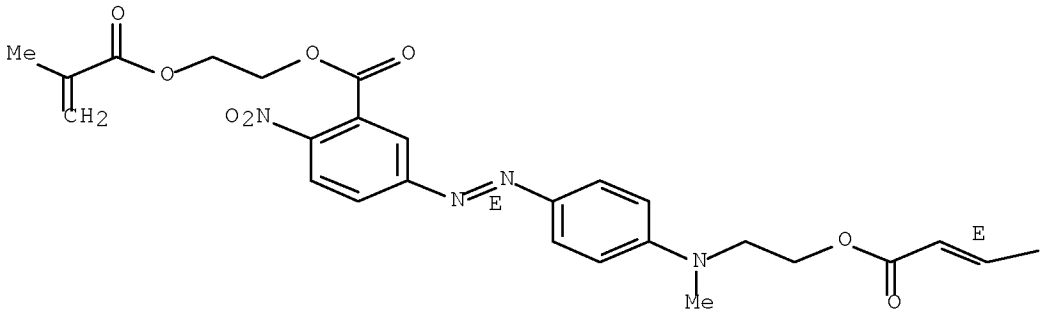


CM 2

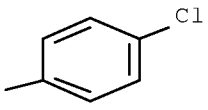
CRN 156806-98-3
CMF C31 H29 Cl N4 O8

Double bond geometry as shown.

PAGE 1-A



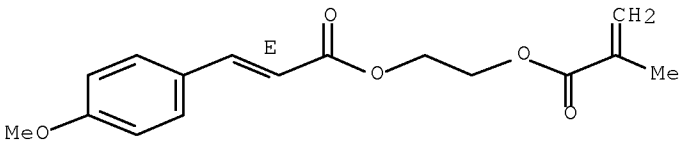
PAGE 1-B



CM 3

CRN 133750-25-1
CMF C16 H18 O5

Double bond geometry as shown.

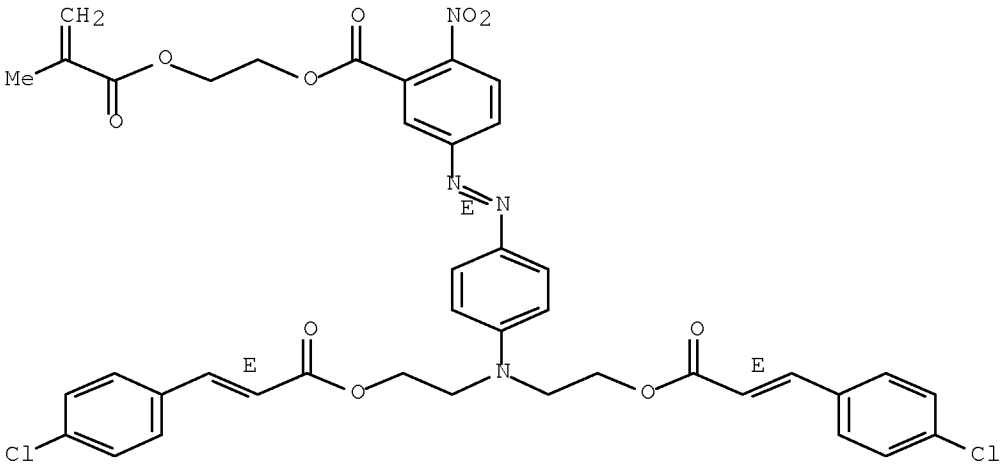


RN 156807-17-9 HCAPLUS
CN Benzoic acid, 5-[[4-[bis[2-[[3-(4-chlorophenyl)-1-oxo-2-propenyl]oxy]ethyl]amino]phenyl]azo]-2-nitro-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, (E,E,E)-, polymer with (E)-2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 156807-16-8
CMF C41 H36 Cl2 N4 O10

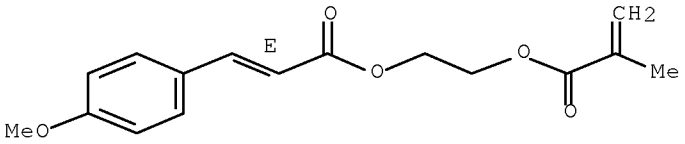
Double bond geometry as shown.



CM 2

CRN 133750-25-1
CMF C16 H18 O5

Double bond geometry as shown.



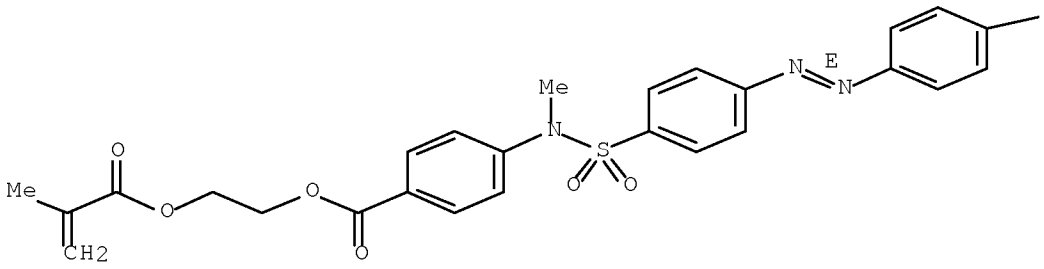
RN 156807-27-1 HCAPLUS
CN Benzoic acid, 4-[[[4-[[4-[[2-[[3-(4-chlorophenyl)-1-oxo-2-propenyl]oxy]ethyl]methylamino]phenyl]azo]phenyl]sulfonyl]methylamino]-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, (E,E)-, polymer with (E)-2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

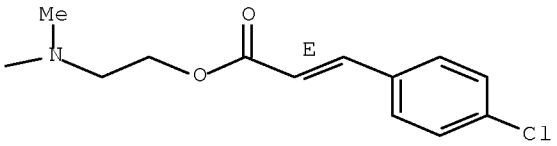
CRN 156807-04-4
CMF C38 H37 Cl N4 O8 S

Double bond geometry as shown.

PAGE 1-A



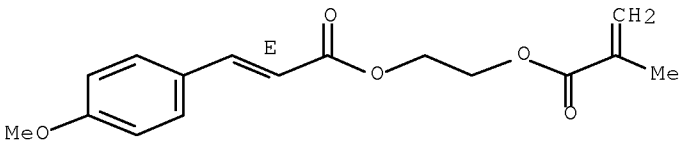
PAGE 1-B



CM 2

CRN 133750-25-1
CMF C16 H18 O5

Double bond geometry as shown.



IC ICM G02F001-35
CC 73-10 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

Section cross-reference(s): 38
ST crosslinkable nonlinear optical polymer
IT Optical materials
(nonlinear, crosslinkable polymers)
IT 116107-78-9P 133750-25-1P 156806-98-3P 156806-99-4P
156807-00-0P 156807-01-1P 156807-02-2P 156807-03-3P
156807-04-4P
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and polymerization of, in crosslinkable nonlinear optical polymer preparation)
IT 52234-98-7P 156806-89-2P 156806-90-5P 156806-91-6P
156806-92-7P 156806-93-8P 156806-94-9P 156806-95-0P
156806-96-1P 156806-97-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in crosslinkable nonlinear optical polymer preparation)
IT 156807-05-5P 156807-07-7P 156807-09-9P
156807-11-3P 156807-12-4P 156807-13-5P
156807-14-6P 156807-15-7P 156807-17-9P 156807-21-5P
156807-22-6P 156807-24-8P 156807-26-0P 156807-27-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, as crosslinkable nonlinear optical material)
IT 79-41-4, reactions 93-90-3, N-(2-Hydroxyethyl)-N-methylaniline
104-15-4, reactions 120-07-0, N,N-Bis-(2-hydroxyethyl)-aniline
140-10-3, trans-Cinnamic acid, reactions 538-75-0,
Dicyclohexylcarbodiimide 868-77-9 940-62-5, trans-4-
Chlorocinnamic acid 943-89-5, trans-4-Methoxycinnamic acid
1122-58-3, 4-Dimethylaminopyridine 2154-66-7, 4-
Diazobenzenesulfonic acid 10541-83-0, 4-N-Methylaminobenzoic acid
13280-60-9, 5-Amino-2-nitrobenzoic acid 19367-38-5 25952-53-8,
N-(3-Dimethylaminopropyl)-N'-ethylcarbodiimide hydrochloride
65209-97-4 156807-18-0 156807-19-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in crosslinkable nonlinear optical polymer preparation)

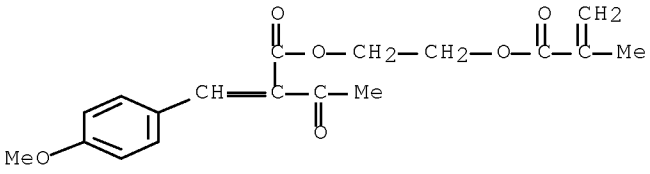
L39 ANSWER 23 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:484029 HCAPLUS Full-text
DOCUMENT NUMBER: 121:84029
ORIGINAL REFERENCE NO.: 121:15127a,15130a
TITLE: Reaction behavior of monomeric β-ketoesters. 3. Polymerizable reaction products of 2-acetoacetoxyethyl methacrylate with aromatic isocyanates and aldehydes
AUTHOR(S): Moszner, Norbert; Zeuner, Frank; Salz, Ulrich; Rheinberger, Volker
CORPORATE SOURCE: Ivoclar AG, Schaan, FL-9494, Liechtenstein
SOURCE: Polymer Bulletin (Berlin, Germany) (1994), 33(1), 43-9
CODEN: POBUDR; ISSN: 0170-0839
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The addition of 2-acetoacetoxyethyl methacrylate (I) to aromatic isocyanates such as Ph isocyanate or tolylene 2,4-diisocyanate, and the Knoevenagel condensation of I with aromatic aldehydes yielded polymerizable products. These monomers were characterized by elemental analyses, IR, 1H NMR and partially by 13C NMR spectroscopy. The radical polymerization of synthesized I-isocyanate adducts formed polymeric blocked isocyanates. The Knoevenagel

condensate of I with benzaldehyde was radically polymerizable and tended to crosslink during its homopolymn.

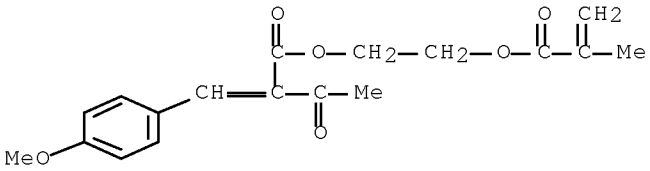
IT 156790-04-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of)
RN 156790-04-4 HCAPLUS
CN Butanoic acid, 2-[(4-methoxyphenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 156790-02-2
CMF C18 H20 O6



IT 156790-02-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and polymerization of)
RN 156790-02-2 HCAPLUS
CN Butanoic acid, 2-[(4-methoxyphenyl)methylene]-3-oxo-, 2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl ester (CA INDEX NAME)



CC 35-2 (Chemistry of Synthetic High Polymers)
IT Glass temperature and transition
(of acetoacetoxyethyl methacrylate derivative polymers)
IT Polymerization
(of acetoacetoxyethyl methacrylate reaction products with aromatic isocyanates and aldehydes)
IT 15802-62-7P 15802-63-8P 51728-47-3P 156790-00-0P
156790-01-1P 156790-03-3P 156790-04-4P 156790-06-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of)
IT 156789-99-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and polymerization)
IT 51727-47-0P 156789-97-8P 156789-98-9P 156790-02-2P
156790-05-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT (Reactant or reagent)
(preparation and polymerization of)

L39 ANSWER 24 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:497018 HCAPLUS Full-text
DOCUMENT NUMBER: 119:97018
ORIGINAL REFERENCE NO.: 119:17517a,17520a
TITLE: Process for producing ultraviolet-absorbent self-dispersible water-based vinyl resin and fine resin particles
INVENTOR(S): Minami, Takahide; Noumi, Yoko; Nakamura, Koichi
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9220721	A1	19921126	WO 1992-JP663	199205 22 <--
W: JP, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
JP 3202233	B2	20010827	JP 1992-510540	199205 22 <--
PRIORITY APPLN. INFO.:			JP 1991-117418 A	199105 22 <--
			WO 1992-JP663 W	199205 22 <--

AB The title process, useful for preparation of cosmetics, is described by solution polymerization of monomers bearing groups with 20-95% mol. coefficient absorption ≥10,000 UV absorption [selected from (meth)acrylamides, (meth)acrylate, and/or substituted vinylbenzenes] and 5-80% salt formable group-containing monomers, neutralizing, and adding water. Thus, an emulsion with particles with average diameter ≤0.03 μm was prepared by polymerizing a mixture of CH2CHCONH(CH2)2OCO-p-C6H4NEt2 80, Bu acrylate 10, and acrylic acid 9 parts in Me Et ketone (I) solution with V 59, precipitating with 1:1 Me2CO-EtOH mixture, neutralizing with 1N NaOH in I, and adding H2O.

IT 149273-66-5 149273-68-7 149273-69-8
RL: USES (Uses)
(polymer blends, aqueous emulsions, UV-absorbent and self-dispersible)

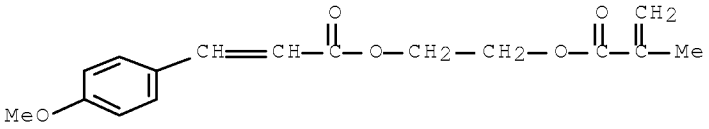
RN 149273-66-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 149273-57-4
CMF (C16 H18 O5 . C4 H6 O2)x
CCI PMS

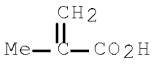
CM 2

CRN 107162-92-5
CMF C16 H18 O5



CM 3

CRN 79-41-4
CMF C4 H6 O2



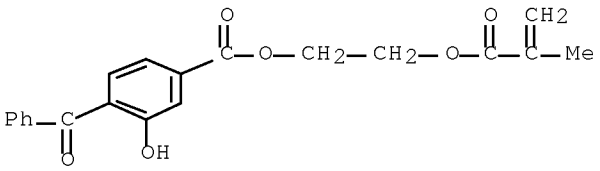
RN 149273-68-7 HCAPLUS
CN Benzoic acid, 4-benzoyl-3-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 149273-60-9
CMF (C20 H18 O6 . C16 H18 O5 . C4 H6 O2)x
CCI PMS

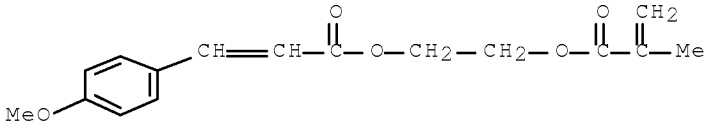
CM 2

CRN 149273-59-6
CMF C20 H18 O6



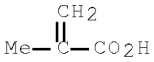
CM 3

CRN 107162-92-5
CMF C16 H18 O5



CM 4

CRN 79-41-4
CMF C4 H6 O2



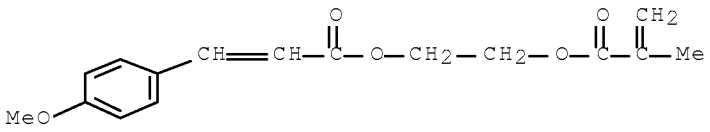
RN 149273-69-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate, hydrochloride (9CI) (CA INDEX NAME)

CM 1

CRN 149273-61-0
CMF (C16 H18 O5 . C9 H18 N2 O . C5 H8 O2)x
CCI PMS

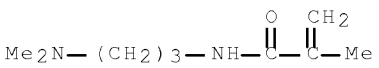
CM 2

CRN 107162-92-5
CMF C16 H18 O5



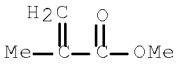
CM 3

CRN 5205-93-6
CMF C9 H18 N2 O



CM 4

CRN 80-62-6
CMF C5 H8 O2

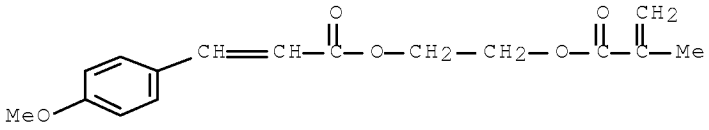


IT 149273-57-4 149273-60-9 149273-61-0
RL: USES (Uses)
(polymer salt blends, aqueous emulsions, UV-absorbent and self-dispersible)

RN 149273-57-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

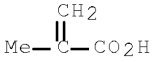
CM 1

CRN 107162-92-5
CMF C16 H18 O5



CM 2

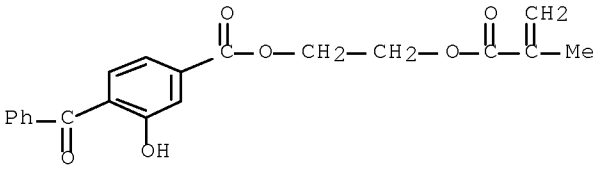
CRN 79-41-4
CMF C4 H6 O2



RN 149273-60-9 HCAPLUS
CN Benzoic acid, 4-benzoyl-3-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

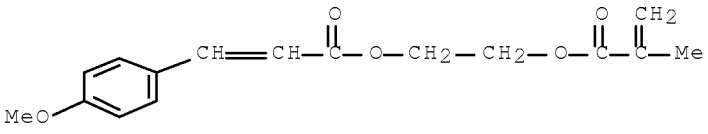
CM 1

CRN 149273-59-6
CMF C20 H18 O6



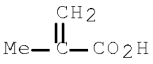
CM 2

CRN 107162-92-5
CMF C16 H18 O5



CM 3

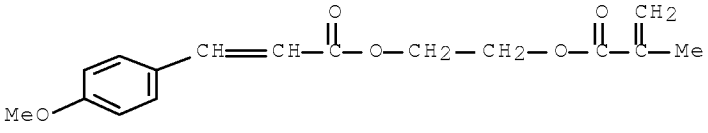
CRN 79-41-4
CMF C4 H6 O2



RN 149273-61-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

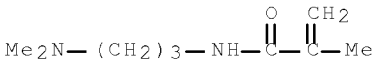
CM 1

CRN 107162-92-5
CMF C16 H18 O5



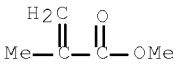
CM 2

CRN 5205-93-6
CMF C9 H18 N2 O



CM 3

CRN 80-62-6
CMF C5 H8 O2



IC ICM C08F212-14
ICS C08F220-06; C08F220-28; C08F220-36; C08F220-58; C08L101-02; C08F220-60; C08F222-02; C08F006-14; C08F008-44
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 62
ST acrylamide copolymer emulsion UV absorption; acrylate copolymer emulsion cosmetic; vinylbenzene copolymer emulsion polymn
IT Light stabilizers
(UV, aqueous emulsions, polymerization of, for cosmetics)
IT Polymerization
(emulsion, of monomers bearing UV absorbing and salt-forming group, self-dispersible)
IT Sunscreens
(emulsions, UV-absorbent polymers for)
IT 149273-63-2 149273-64-3 149273-65-4 149273-66-5
149273-67-6 149273-68-7 149273-69-8
149273-71-2 149273-72-3 149303-89-9 150068-58-9
RL: USES (Uses)
(polymer blends, aqueous emulsions, UV-absorbent and self-dispersible)
IT 149273-47-2 149273-49-4 149273-51-8 149273-53-0 149273-55-2
149273-56-3 149273-57-4 149273-58-5 149273-60-9
149273-61-0 149273-62-1 149273-70-1
RL: USES (Uses)
(polymer salt blends, aqueous emulsions, UV-absorbent and self-dispersible)

L39 ANSWER 25 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1991:207924 HCAPLUS Full-text
DOCUMENT NUMBER: 114:207924
ORIGINAL REFERENCE NO.: 114:35087a,35090a
TITLE: Synthesis, characterization, and photochemistry of a cinnamate-containing liquid-crystalline side-chain polymer
AUTHOR(S): Noonan, John M.; Caccamo, A. F.
CORPORATE SOURCE: Photogr. Res. Lab., Eastman Kodak Co., Rochester, NY, 14650-2109, USA
SOURCE: ACS Symposium Series (1990), 435(Liq.-Cryst. Polym.), 144-57
CODEN: ACSMC8; ISSN: 0097-6156
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Novel liquid-crystalline vinyl polymers containing UV-sensitive p-methoxycinnamate chromophore side-chains were prepared The photochem. and phys. processes of thin films of these polymers revealed that the photodimerization of the p-methoxycinnamate moieties was very sensitive to their geometrical arrangement in the polymer matrix. The relative quantum yield of the formation of cyclobutyl groups increased by a factor of .apprx.8 for the liquid-crystalline p-methoxycinnamate group-containing polymer films compared to films of the amorphous analog. The quantum yield approached the theor. limit for this system.

IT 133750-22-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(liquid-crystalline, preparation and characterization of)

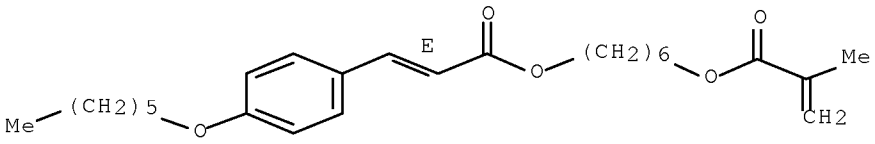
RN 133750-22-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 6-[[3-[4-(hexyloxy)phenyl]-1-oxo-2-propenyl]oxy]hexyl ester, (E)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 133750-21-7
CMF C25 H36 O5

Double bond geometry as shown.



IT 133750-26-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(liquid-crystalline, preparation and photochem. dimerization of cinnamate moieties of, conformation in relation to)

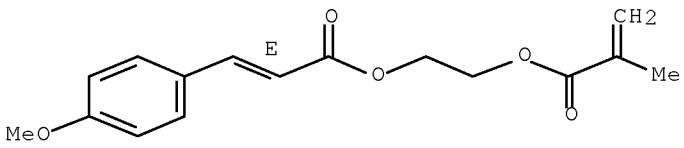
RN 133750-26-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl ester, (E)-, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

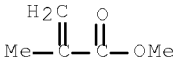
CRN 133750-25-1
CMF C16 H18 O5

Double bond geometry as shown.



CM 2

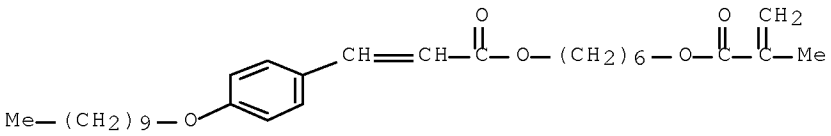
CRN 80-62-6
CMF C5 H8 O2



IT 133750-24-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of)
RN 133750-24-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 6-[[3-[4-(decyloxy)phenyl]-1-oxo-2-propenyl]oxy]hexyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

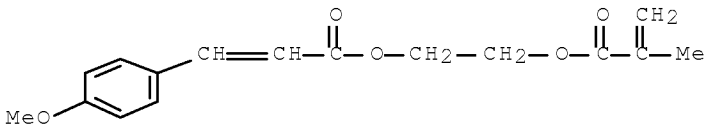
CRN 133750-23-9
CMF C29 H44 O5



IT 133750-18-2P 133750-20-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and glass temperature of)
RN 133750-18-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

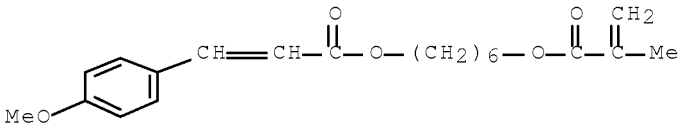
CRN 107162-92-5
CMF C16 H18 O5



RN 133750-20-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 6-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]hexyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 133750-19-3
CMF C20 H26 O5



CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 75
ST methoxycinnamate contg polymer liq cryst; dimerization photochem cinnamate polymer conformation; pendent cinnamate polymer liq cryst
IT 125248-41-1P 133750-22-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(liquid-crystalline, preparation and characterization of)
IT 98-88-4DP, Benzoyl chloride, reaction products with hydrolyzed poly(vinyl alc.)-p-methoxycinnamoyl chloride reaction products 9002-89-5DP, Poly(vinyl alcohol), hydrolyzed, reaction products with benzoyl chloride and p-methoxycinnamoyl chloride 9002-89-5DP, reaction products with benzoyl chloride and p-methoxycinnamoyl chloride 34446-64-5DP, p-Methoxycinnamoyl chloride, reaction products with hydrolyzed poly(vinyl alc.)-benzoyl chloride reaction products 133750-26-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(liquid-crystalline, preparation and photochem. dimerization of cinnamate moieties of, conformation in relation to)
IT 133750-24-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of)
IT 133750-18-2P 133750-20-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and glass temperature of)

L39 ANSWER 26 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:24645 HCAPLUS Full-text
DOCUMENT NUMBER: 110:24645
ORIGINAL REFERENCE NO.: 110:4173a,4176a
TITLE: Cation-binding properties of photodimerizable polymers bearing benzodiglyme units
AUTHOR(S): Shirai, Masamitsu; Ishida, Haruyuki; Tanaka, Makoto
CORPORATE SOURCE: Fac. Eng., Univ. Osaka Prefect., Sakai, 591, Japan
SOURCE: Journal of Polymer Science, Part B: Polymer Physics (1988), 26(10), 2075-91
CODEN: JPBPEM; ISSN: 0887-6266
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Polymers which have glyme units as alkali cation binding sites and photodimerizable cinnamoyl units were prepared by the radical polymerization of corresponding monomers. The alkali cation binding ability and selectivity of the polymers, which were studied by a method of picrate salts extraction, were strongly dependent on the length of glyme chains. When irradiated with UV light, the cinnamoyl groups caused dimerization in dilute solns. Although the photodimerization of the polymers with relatively short glyme chains enhanced their cation binding ability, the photodimerization of the polymers bearing long glyme chains reduced their cation binding ability. The use of

alkali metal cations as templates emphasized the effect of photodimerization on the cation binding properties. The effect of alkali metal cations on the quantum yields of the photodimerization of the polymers showed that 2 or more benzodiglyme units took part in the binding of one cation. The polymers bearing benzodiglymes, crown ethers, and cinnamoyl moieties were also prepared by the radical copolymn. of the corresponding monomers. The crown ether units of the copolymers predominantly participated in the cation binding. The photodimerization of the copolymers with suitable alkali metal cations as templates strongly enhanced their cation binding ability.

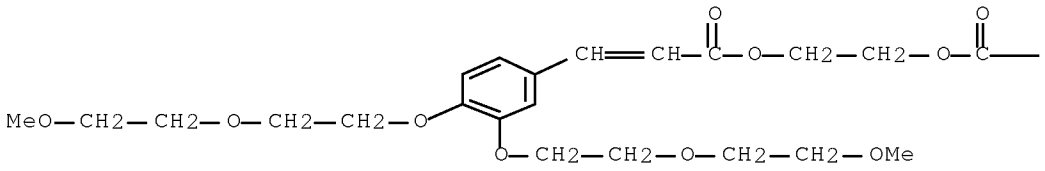
IT 109145-08-6DP, photodimerized 109145-08-6P
109145-10-0DP, photodimerized 109145-10-0P
109145-12-2DP, photodimerized 109145-12-2P
117955-16-5DP, photodimerized 117955-16-5P
117955-17-6DP, photodimerized 117955-17-6P
117955-18-7DP, photodimerized 117955-18-7P
117968-76-0DP, photodimerized 117968-76-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and cation-binding properties of)

RN 109145-08-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-(2-methoxyethoxy)ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

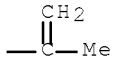
CM 1

CRN 109145-07-5
CMF C25 H36 O10

PAGE 1-A



PAGE 1-B

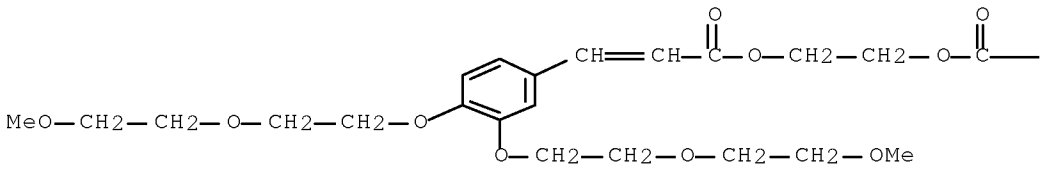


RN 109145-08-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-(2-methoxyethoxy)ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

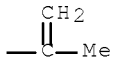
CM 1

CRN 109145-07-5
CMF C25 H36 O10

PAGE 1-A



PAGE 1-B

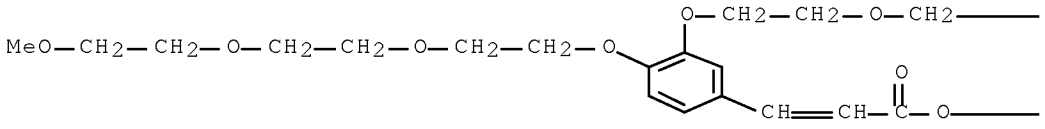


RN 109145-10-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-[2-(2-methoxyethoxy)ethoxy]ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

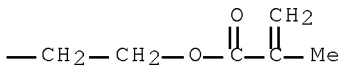
CM 1

CRN 109145-09-7
CMF C29 H44 O12

PAGE 1-A



PAGE 1-B

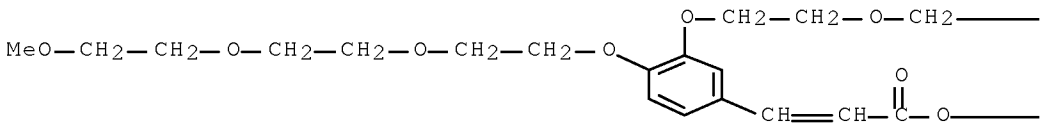


RN 109145-10-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-[2-(2-methoxyethoxy)ethoxy]ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

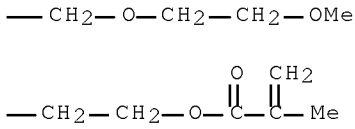
CM 1

CRN 109145-09-7
CMF C29 H44 O12

PAGE 1-A



PAGE 1-B

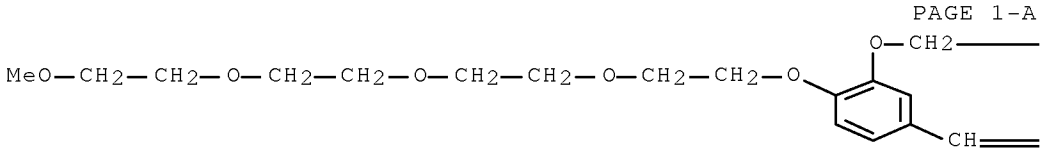


RN 109145-12-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis(3,6,9,12-tetraoxatridec-1-yloxy)phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

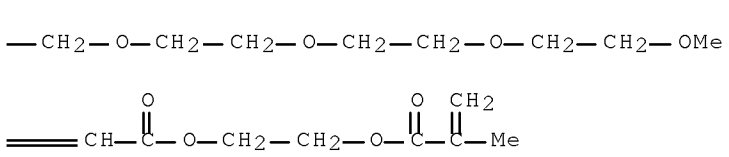
CM 1

CRN 109145-11-1
CMF C33 H52 O14

PAGE 1-A



PAGE 1-B

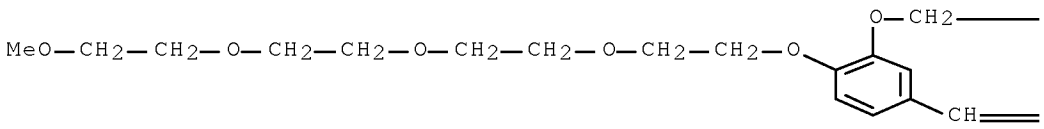


RN 109145-12-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis(3,6,9,12-tetraoxatridec-1-yloxy)phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

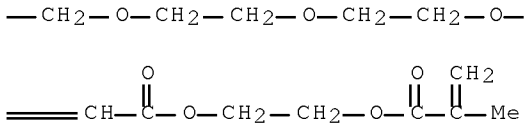
CM 1

CRN 109145-11-1
CMF C33 H52 O14

PAGE 1-A



PAGE 1-B

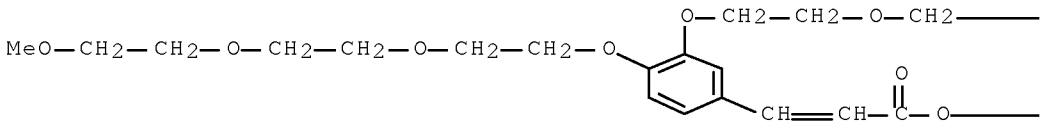


RN 117955-16-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-[2-(2-methoxyethoxy)ethoxy]ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, polymer with 2-[[3-(2,3,5,6,8,9,11,12-octahydro-1,4,7,10,13-benzopentaoxacyclopentadecin-15-yl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

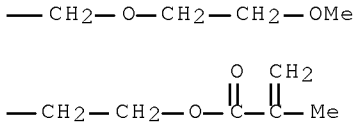
CM 1

CRN 109145-09-7
CMF C29 H44 O12

PAGE 1-A

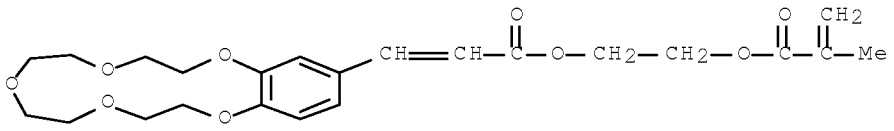


PAGE 1-B



CM 2

CRN 96720-70-6
CMF C23 H30 O9

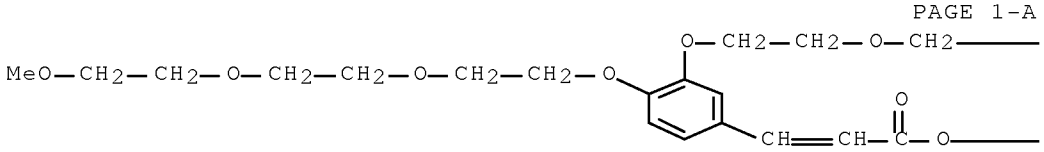


RN 117955-16-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-[2-(2-methoxyethoxy)ethoxy]ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, polymer with 2-[[3-(2,3,5,6,8,9,11,12-octahydro-1,4,7,10,13-benzopentaoxacyclopentadecin-15-yl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

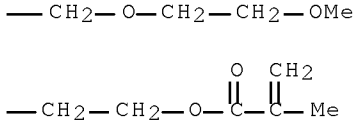
CM 1

CRN 109145-09-7
CMF C29 H44 O12

PAGE 1-A

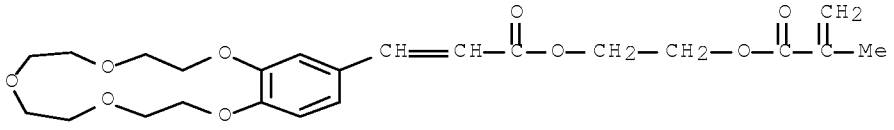


PAGE 1-B



CM 2

CRN 96720-70-6
CMF C23 H30 O9

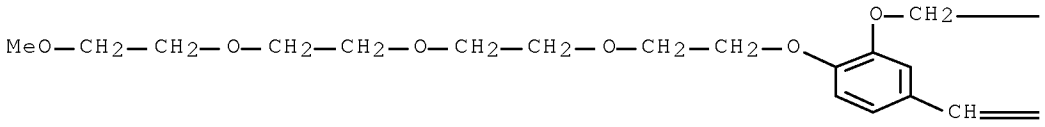


RN 117955-17-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis(3,6,9,12-tetraoxatridec-1-yloxy)phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, polymer with 2-[[3-(2,3,5,6,8,9,11,12-octahydro-1,4,7,10,13-benzopentaoxacyclopentadecin-15-yl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

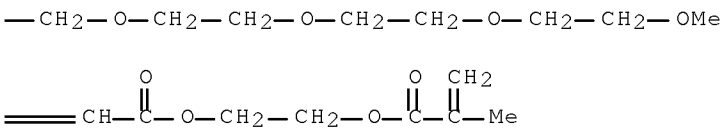
CM 1

CRN 109145-11-1
CMF C33 H52 O14

PAGE 1-A

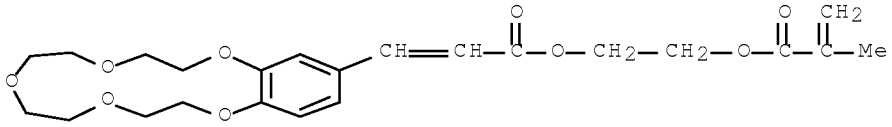


PAGE 1-B



CM 2

CRN 96720-70-6
CMF C23 H30 O9

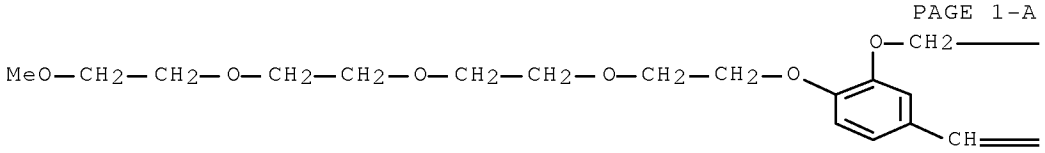


RN 117955-17-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis(3,6,9,12-tetraoxatridec-1-yloxy)phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, polymer with 2-[[3-(2,3,5,6,8,9,11,12-octahydro-1,4,7,10,13-benzopentaoxacyclopentadecin-15-yl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

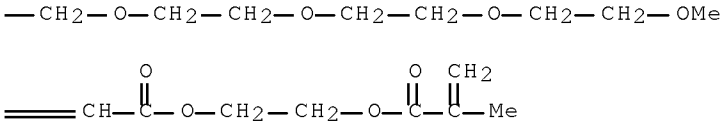
CM 1

CRN 109145-11-1
CMF C33 H52 O14

PAGE 1-A

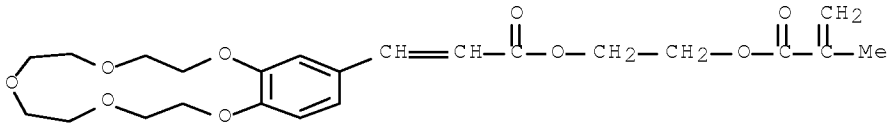


PAGE 1-B



CM 2

CRN 96720-70-6
CMF C23 H30 O9

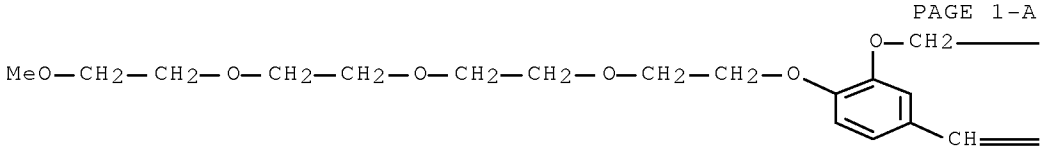


RN 117955-18-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis(3,6,9,12-tetraoxatridec-1-yloxy)phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, polymer with 2-[[3-(2,3,5,6,8,9,11,12,14,15-decahydro-1,4,7,10,13,16-benzohexaoxacyclooctadecin-18-yl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

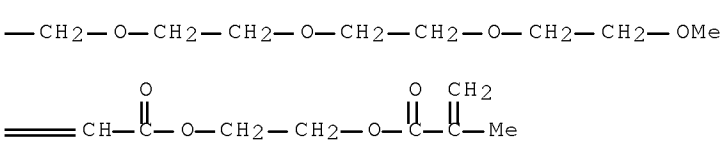
CM 1

CRN 109145-11-1
CMF C33 H52 O14

PAGE 1-A

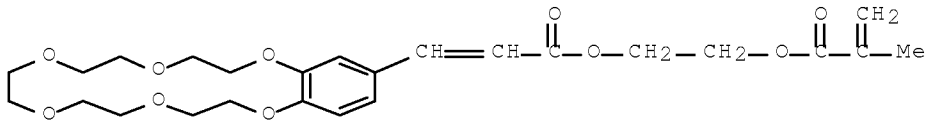


PAGE 1-B



CM 2

CRN 96720-72-8
CMF C25 H34 O10

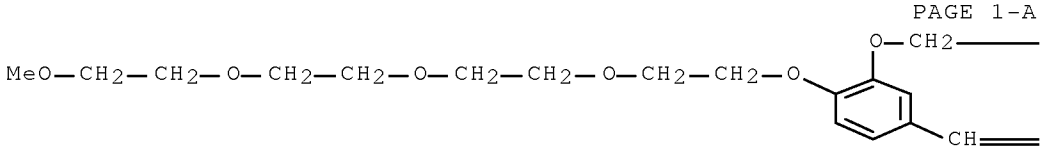


RN 117955-18-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis(3,6,9,12-tetraoxatridec-1-yloxy)phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, polymer with 2-[[3-(2,3,5,6,8,9,11,12,14,15-decahydro-1,4,7,10,13,16-benzohexaoxacyclooctadecin-18-yl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

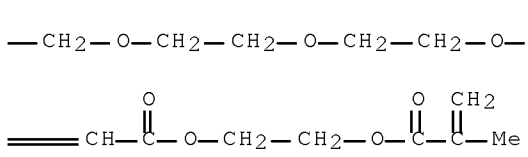
CM 1

CRN 109145-11-1
CMF C33 H52 O14

PAGE 1-A

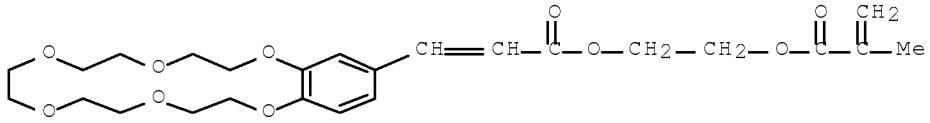


PAGE 1-B



CM 2

CRN 96720-72-8
CMF C25 H34 O10

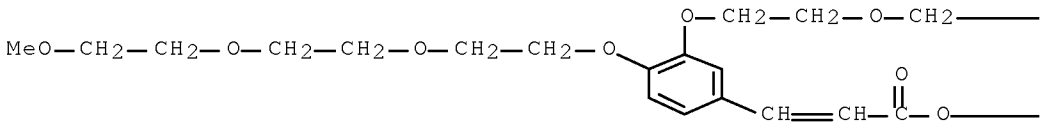


RN 117968-76-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-[2-(2-methoxyethoxy)ethoxy]ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, polymer with 2-[[3-(2,3,5,6,8,9,11,12,14,15-decahydro-1,4,7,10,13,16-benzohexaoxacyclooctadecin-18-yl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

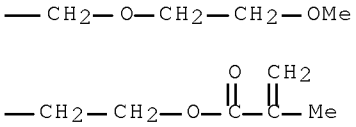
CM 1

CRN 109145-09-7
CMF C29 H44 O12

PAGE 1-A

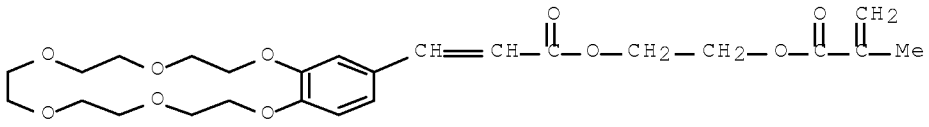


PAGE 1-B



CM 2

CRN 96720-72-8
CMF C25 H34 O10

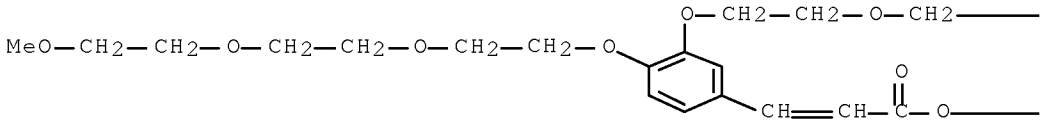


RN 117968-76-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-[2-(2-methoxyethoxy)ethoxy]ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, polymer with 2-[[3-(2,3,5,6,8,9,11,12,14,15-decahydro-1,4,7,10,13,16-benzohexaoxacyclooctadecin-18-yl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

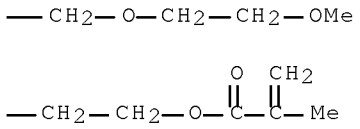
CM 1

CRN 109145-09-7
CMF C29 H44 O12

PAGE 1-A

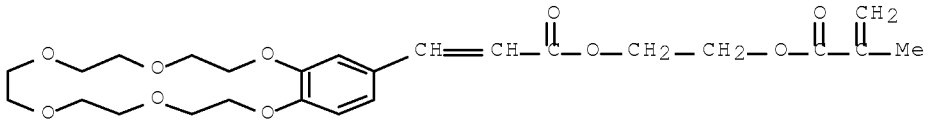


PAGE 1-B



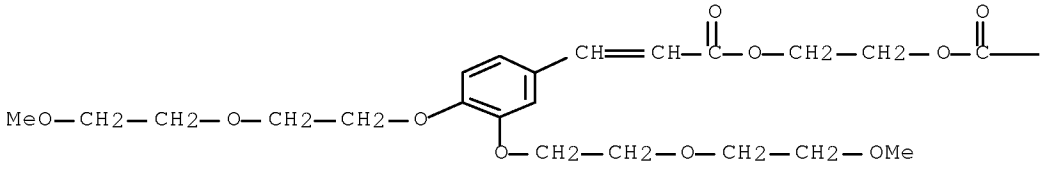
CM 2

CRN 96720-72-8
CMF C25 H34 O10

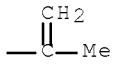


IT 109145-07-5P 109145-09-7P 109145-11-1P
RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation and polymerization of)
RN 109145-07-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-(2-methoxyethoxy)ethoxy]phenyl]-1-oxo-2-propen-1-yl]oxy]ethyl ester (CA INDEX NAME)

PAGE 1-A

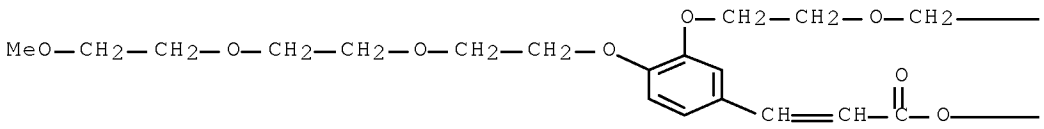


PAGE 1-B

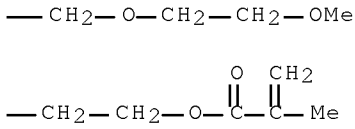


RN 109145-09-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-[2-(2-methoxyethoxy)ethoxy]ethoxy]phenyl]-1-oxo-2-propen-1-yl]oxy]ethyl ester (CA INDEX NAME)

PAGE 1-A

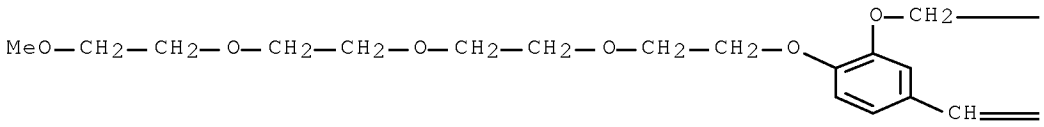


PAGE 1-B

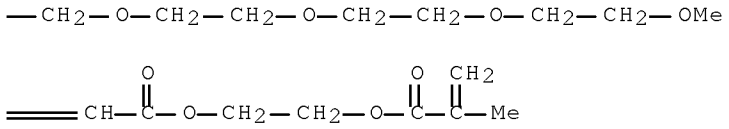


RN 109145-11-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis(3,6,9,12-tetraoxatridec-1-yloxy)phenyl]-1-oxo-2-propen-1-yl]oxy]ethyl ester (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



CC 37-4 (Plastics Manufacture and Processing)
Section cross-reference(s): 35
ST cation binding benzodiglyme contg polymer; photodimerization benzodiglyme contg polymer
IT Cations
(binding of, by photodimerizable polymers containing benzodiglyme units)
IT Polymerization
(radical, of benzodiglyme unit-containing methacrylates)
IT 7439-93-2, Lithium, reactions 7440-09-7, Potassium, reactions 7440-17-7, Rubidium, reactions 7440-23-5, Sodium, reactions 7440-46-2, Cesium, reactions 7664-41-7, Ammonia, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(binding of, by photodimerizable polymers containing benzodiglyme units)
IT 109145-08-6DP, photodimerized 109145-08-6P 109145-10-0DP, photodimerized 109145-10-0P 109145-12-2DP, photodimerized 109145-12-2P 117955-16-5DP, photodimerized 117955-16-5P

117955-17-6DP, photodimerized 117955-17-6P
117955-18-7DP, photodimerized 117955-18-7P
117968-76-0DP, photodimerized 117968-76-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and cation-binding properties of)
IT 109145-07-5P 109145-09-7P 109145-11-1P
RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation and polymerization of)

L39 ANSWER 27 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:632351 HCAPLUS Full-text
DOCUMENT NUMBER: 109:232351
ORIGINAL REFERENCE NO.: 109:38443a,38446a
TITLE: Anisotropic cinnamic acrylate polymers
INVENTOR(S): Nakauchi, Jun; Kageyama, Yoshitaka; Sako, Yoshihiro; Minami, Shunsuke
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

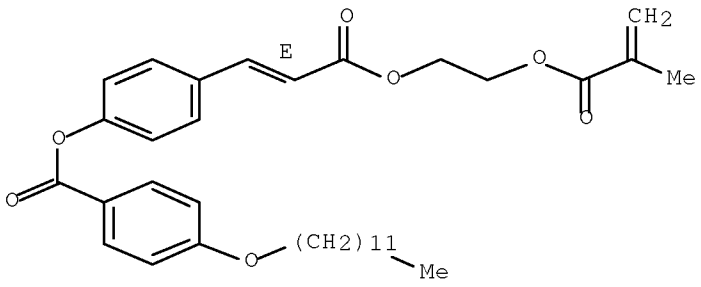
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63092609	A	19880423	JP 1986-238756	19861007
			<--	
PRIORITY APPLN. INFO.:			JP 1986-238756	19861007
			<--	

OTHER SOURCE(S): MARPAT 109:232351
AB Title polymers, useful for optical devices, are prepared by spraying active energy curing agent-containing compound RZCO2ZCH:CHCO2R1OCOC(X):CH2 [R = C1-18 alkyloxy, CN; Z = p-phenylene; R1 = (CH2)m, m = 2-6; X = H, Me] onto magentically oriented substrates and irradiating. A mixture of 10 g 4-(4'-dodecyloxybenzoyloxy) cinnamic acid 2-methacryloyloxyethyl ester, 50 mg Irgacure 651, and 50 mg hydroquinone was heated at 80°, coated onto cellophane, covered with glass, cooled from 90° to 65° at 0.1°/min, and photoirradiated at 30 m W/cm2, 365 nm, and 50° for 5 min to give a sample having anisotropy and light transmittance >80% at 400-900 nm.
IT 117827-63-1P
RL: PREP (Preparation)
(anisotropic, preparation of, for optical devices)
RN 117827-63-1 HCAPLUS
CN Benzoic acid, 4-(dodecyloxy)-, 4-[3-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]-3-oxo-1-propenyl]phenyl ester, (E)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 111305-08-9
CMF C34 H44 O7

Double bond geometry as shown.



IC ICM C08F002-48
ICS C08F020-40; C09K019-20
CC 38-3 (Plastics Fabrication and Uses)
ST cinnamate polymer anisotropic optical device; magnetic oriented cellophane cinnamate anisotropic
IT Optical instruments
(anisotropic cinnamic acrylate polymers for)
IT 117827-63-1P 117827-64-2P
RL: PREP (Preparation)
(anisotropic, preparation of, for optical devices)

L39 ANSWER 28 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:632350 HCAPLUS Full-text
DOCUMENT NUMBER: 109:232350
ORIGINAL REFERENCE NO.: 109:38443a,38446a
TITLE: Manufacture of anisotropic cinnamic acrylate polymers
INVENTOR(S): Nakauchi, Jun; Kageyama, Yoshitaka; Sako, Yoshihiro; Minami, Shunsuke
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63092608	A	19880423	JP 1986-238755	19861007
			<--	
PRIORITY APPLN. INFO.:			JP 1986-238755	19861007
			<--	

OTHER SOURCE(S): MARPAT 109:232350
AB Title polymers, useful for optical devices, are prepared by static elec. orientation of ≥1 RZCO2ZCH:CHCO2R1OCOC(X):CH2 [R = C1-18 alkyloxy, CN; R1 = (CH2)m, m = 2-6; X = H, Me; Z = p-phenylene] containing active energy curing agent and curing by irradiation A mixture of 10 g 2-methacryloyloxyethyl 4-(4'- dodecyoxybenzoyloxy)cinnamate, 50 mg Irgacure 651, and 50 mg hydroquinone was oriented by static electricity at 77° and 15 kW, cooled at 0.1°/min to

65°, and photo-irradiated at 365 nm, 30 m W/cm2, and 50° to give a sample having light transmittance >80% at 400-900 nm and anisotropy at 200°.

IT 117827-63-1P
RL: PREP (Preparation)
(preparation of, anisotropic, static electricity orientation in, for optical devices)

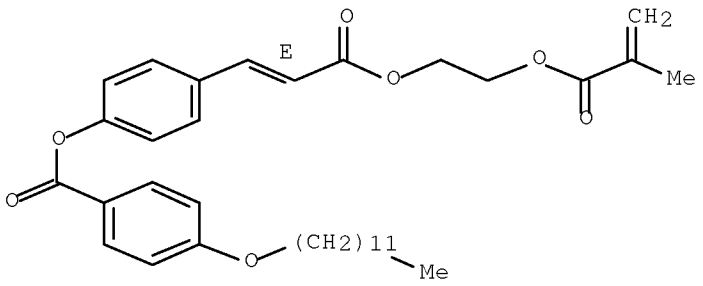
RN 117827-63-1 HCAPLUS

CN Benzoic acid, 4-(dodecyloxy)-, 4-[3-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]-3-oxo-1-propenyl]phenyl ester, (E)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 111305-08-9
CMF C34 H44 O7

Double bond geometry as shown.



IC ICM C08F002-48
ICS C08F020-40; C08J003-28

ICA C09K019-20

CC 38-3 (Plastics Fabrication and Uses)

ST static elec orientation cinnamate acrylate; cinnamate polymer anisotropic optical device

IT Optical instruments
(anisotropic cinnamic acrylate polymers for)

IT 24650-42-8
RL: USES (Uses)
(photoinitiators, for acrylate cinnamate, for preparation anisotropic polymers for optical devices)

IT 117827-63-1P 117827-64-2P
RL: PREP (Preparation)
(preparation of, anisotropic, static electricity orientation in, for optical devices)

L39 ANSWER 29 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:459550 HCAPLUS Full-text

DOCUMENT NUMBER: 107:59550

ORIGINAL REFERENCE NO.: 107:9905a,9908a

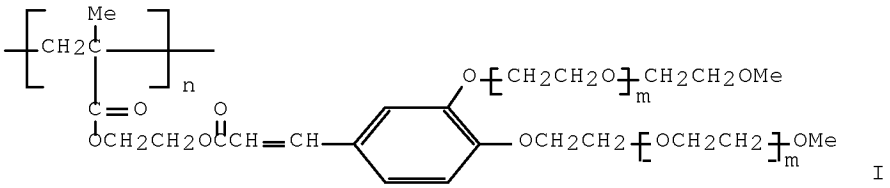
TITLE: Syntheses and cation binding properties of polymers bearing benzodiglymes and cinnamoyl units

AUTHOR(S): Shirai, Masamitsu; Ishida, Haruyuki; Tanaka, Makoto

CORPORATE SOURCE: Fac. Eng., Univ. Osaka Prefect., Sakai, 591, Japan

SOURCE: Journal of Polymer Science, Part C: Polymer

Letters (1987), 25(4), 145-51
CODEN: JSCLE2; ISSN: 0887-6258
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB I (m = 1,2,3) containing benzodiglymes and photodimerizable cinnamic acid ester groups were prepared by radical polymerization of the resp. monomer in THF at 60°. The order of cation selectivity for I (m = 1,2) was K+ > Rb+ > Cs+ > NH4+ > Na+ .apprx. Li+ while that for I (m = 3) was Rb+ > Cs+ >K+ > NH4+ > Na+ .apprx. Li+. The cation binding ability of I decreased with decreasing m. The effect of photodimerization of I on the cation binding ability and selectivity order was determined

IT 109145-08-6DP, cyclized 109145-08-6P
109145-10-0DP, cyclized 109145-10-0P
109145-12-2DP, cyclized 109145-12-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and cation binding properties of)

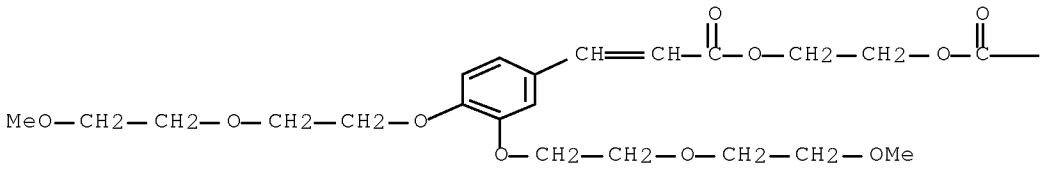
RN 109145-08-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-(2-methoxyethoxy)ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

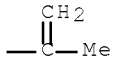
CM 1

CRN 109145-07-5
CMF C25 H36 O10

PAGE 1-A



PAGE 1-B

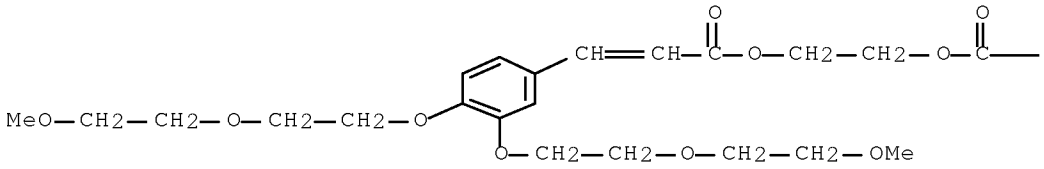


RN 109145-08-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-(2-methoxyethoxy)ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

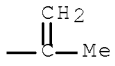
CM 1

CRN 109145-07-5
CMF C25 H36 O10

PAGE 1-A



PAGE 1-B

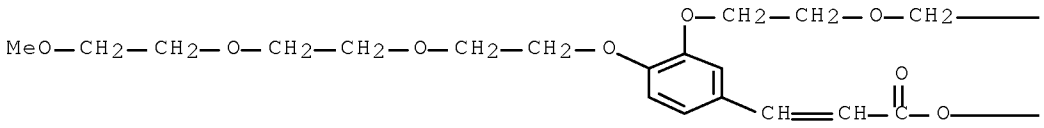


RN 109145-10-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-[2-(2-methoxyethoxy)ethoxy]ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

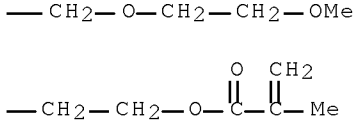
CM 1

CRN 109145-09-7
CMF C29 H44 O12

PAGE 1-A



PAGE 1-B



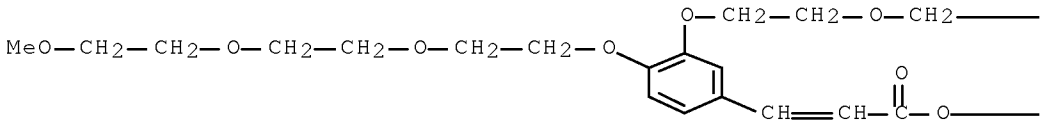
RN 109145-10-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-[2-(2-

methoxyethoxy)ethoxy]ethoxy]phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

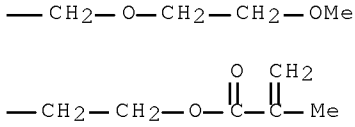
CM 1

CRN 109145-09-7
CMF C29 H44 O12

PAGE 1-A



PAGE 1-B

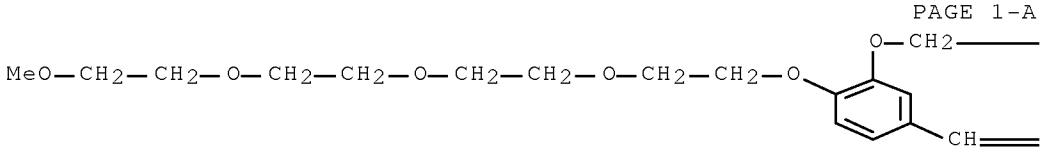


RN 109145-12-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis(3,6,9,12-tetraoxatridec-1-yloxy)phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

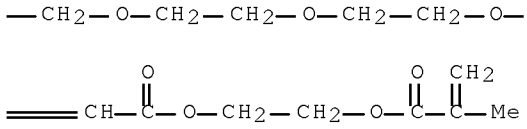
CM 1

CRN 109145-11-1
CMF C33 H52 O14

PAGE 1-A



PAGE 1-B

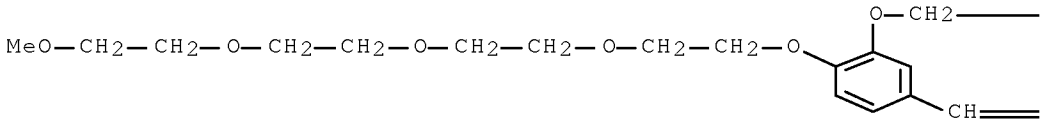


RN 109145-12-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis(3,6,9,12-tetraoxatridec-1-yloxy)phenyl]-1-oxo-2-propenyl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

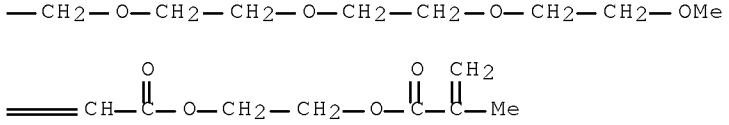
CM 1

CRN 109145-11-1
CMF C33 H52 O14

PAGE 1-A

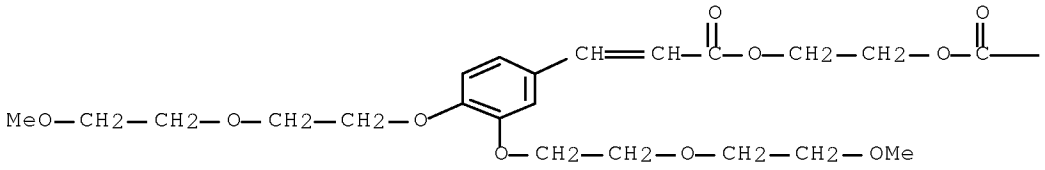


PAGE 1-B

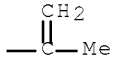


IT 109145-07-5P 109145-09-7P 109145-11-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and homopolymn. of)
RN 109145-07-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-(2-methoxyethoxy)ethoxy]phenyl]-1-oxo-2-propen-1-yl]oxy]ethyl ester (CA INDEX NAME)

PAGE 1-A

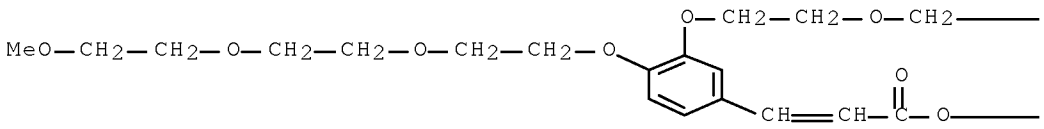


PAGE 1-B

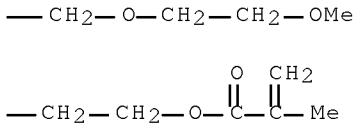


RN 109145-09-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis[2-[2-(2-methoxyethoxy)ethoxy]ethoxy]phenyl]-1-oxo-2-propen-1-yl]oxy]ethyl ester (CA INDEX NAME)

PAGE 1-A

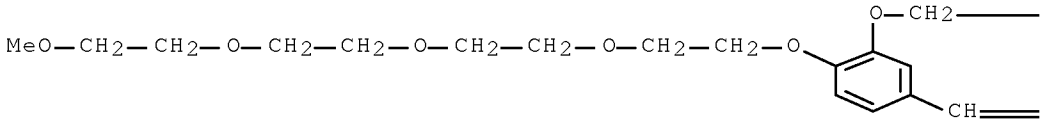


PAGE 1-B

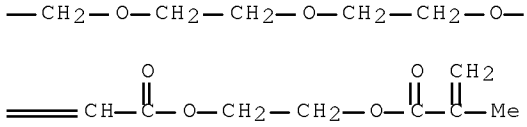


RN 109145-11-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3-[3,4-bis(3,6,9,12-tetraoxatridec-1-yloxy)phenyl]-1-oxo-2-propen-1-yl]oxy]ethyl ester (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36
IT 109145-08-6DP, cyclized 109145-08-6P
109145-10-0DP, cyclized 109145-10-0P
109145-12-2DP, cyclized 109145-12-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and cation binding properties of)
IT 109145-07-5P 109145-09-7P 109145-11-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and homopolymn. of)

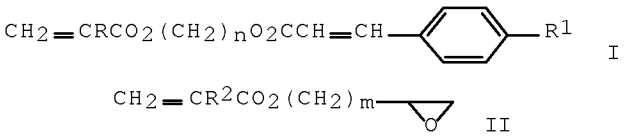
L39 ANSWER 30 OF 30 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:129326 HCAPLUS Full-text
DOCUMENT NUMBER: 106:129326
ORIGINAL REFERENCE NO.: 106:20948h,20949a
TITLE: Photosensitive polymer compositions
INVENTOR(S): Matsuki, Yasuo; Endo, Masayuki; Miyashita, Satoshi; Matsumoto, Shuichi
PATENT ASSIGNEE(S): Japan Synthetic Rubber Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61085421	A	19860501	JP 1984-206865	19841002
JP 03071446	B	19911113		

PRIORITY APPLN. INFO.: JP 1984-206865 19841002

GI



I

II

AB The title compns. are prepared by copolymn of the monomers I (R = H, lower alkyl; R1 = H, lower alkyl, lower alkoxy; n = 2-5) and II (R2 = H, lower alkyl; m = 1-5). The compns., which are especially suited for preparation of protective films of color-separation filters for solid-state photosensitive devices, e.g. charged-coupled devices, fulfill the requirements for such protective films and also are easily applied to substrates by spin coating. Glycidyl methacrylate 42.6, 1-methacryloyl-2-cinnamoyloxyethane 26, and ABIN 0.17 g were heated to obtain 28 g copolymer having the ratio glycidyl unit:cinnamoyl unit 77:23 and polystyrene-converted number-average mol. weight 170,000. A filtered solution of the copolymer was applied to a Si wafer to obtain an extra smooth surface of 1.01 μ thickness. The wafer was baked, UV exposed, developed by immersion in 4.5:1 MEK-iso-PrOH, rinsed with iso-PrOH, and postbaked at 150°. The exposure to 254 nm UV radiation was optimum for obtaining a smooth surface and the max resolution was 30 mJ/cm2. A glass plate coated with the layer transmitted >95% light in the 350-800 nm region. The sectioned layer was not liftable with adhesive tape, even after 5 h boiling in H2O or PhMe. No cracks or color change was observed by 200 h treatment at 200° or by 1000 h irradiation with a halogen lamp. The pencil hardness was 4B. Treatment of the layer at 100° for 30 h in a dye bath (containing Kayanol Milling Red RS-25 and HOAc) did not affect the transmittance in the 400-800 nm region.

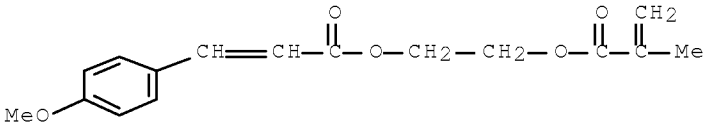
IT 107162-93-6
RL: USES (Uses)
(photocurable compns. containing, for protective layers on color-separation filters in solid-state photosensitive devices)

RN 107162-93-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl ester, polymer with oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

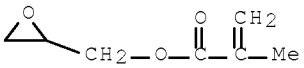
CM 1

CRN 107162-92-5
CMF C16 H18 O5



CM 2

CRN 106-91-2
CMF C7 H10 O3



IC ICM C08F220-20
ICS C08F220-32
ICA C09D003-58
CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 42
ST photocuring polymer color filter protection; photoreceptor solid state protective layer
IT Photoimaging compositions and processes
(photopolymer, containing acrylic polymers for protective layers in solid-state photosensitive devices)
IT Optical imaging devices
(electro-, solid-state, photosensitive acrylic polymer compns. for protective layers on color-separation filters in)
IT 107162-90-3 107162-91-4 107162-93-6 107162-94-7 107162-95-8
RL: USES (Uses)
(photocurable compns. containing, for protective layers on color-separation filters in solid-state photosensitive devices)

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